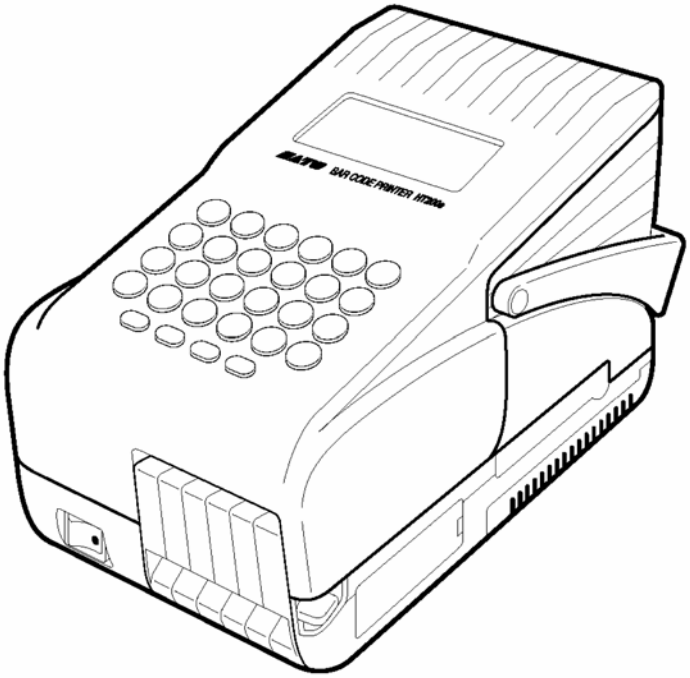
DCS & Labelling Worldwide

HT200e
Stand-Alone Printer



OPERATOR'S MANUAL

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Safety Precautions

Notice with symbols:

In this section, safety precautions about printer operation are explained to ensure proper care and usage. Make sure to read these carefully before using your printer

Danger:	**This symbol indicates information that, if ignored or applied incorrectly, creates the danger of death or personal injury**
Warning:	This symbol indicates informations that, if ignored or applied incorrectly, creates the possibility of personal injury or property damage.

For your use of the printer in proper conditions, we provide several symbols to remind you of the requirements in the operator's manual and printer. These will certainly be useful to protect user's property in advance and prevent from any accident that can be predicted.

A list of safety-cautious symbols:

	It may cause electrical shock.		Don't leave proximity to or put into a fire.
	It may cause injury or hurt.		Plug **OFF** from outlet.
	HOLD BACK from any action for safety reason		Ground **OFF.**
	Don't disassemble.		It may cause potential injury because of high temperature.

	Danger
	PUT the printer on a flat surface If it is placed on an unstable plane, it may drop or fall causing injury.
   	KEEP AWAY from container containing liquid. Do not place printer near container of water or chemical. Should liquid spilled or soaked into printer, turn off the power immediately and pull out the plug from the outlet. Do Not use this device it may cause fire or electric shock. Contact your dealer , sales reprentative or service center for assistants.
   	DO NOT INSERT foreign matter into printer Metals and flammable material should not be inserted into printer openings such as cable outlets or memory card slot. Should these material be accidentally inserted , turn off power and pull out the plug from the power point immediately. Contact your dealer,sales representative or nearest service center. Do not use the device as it may cause fire , lectric shock or unsuspected problem.
	USE voltage that is only specified: AC100V - 220V is only allowed for the use of a printer. If **NOT**, it may cause a fire or electric shock.
   	How to Handle a Power Code: - Any flaw, crack, or damage as a result of overload to the printer, overheat, cord-pulling, or any other process may cause a fire or electric shock. - When any wear on the electric cord , such as bared core wire and wire-breaking, are to be found, contact a dealer, sales representative, or service center. **DO NOT USE** the device as it may cause a fire, electric shock, or unsuspected problem. - **NO** machining or any intentional bending, twisting, or pulling (additional tension) is **ALLOWED**. If printer in a defective state is remained used, it may cause a fire or electric shock.

Warning	
	When the Printer Is Dropped or Damaged: If it happens, turn off the power, pull the plug out, and contact a dealer, sales representative, or service center. **DO NOT USE** the device as it may cause fire and electrical shock.
	DO NOT place any containers with water or chemical, such as flower vase or cups' as well as small metallic objects near the printer. Continued use creates the danger of fire or electrical shock. **If any of these fall into the printer,immediately turn off the power and contact your nearest dealer or service center.**
	DO NOT DISASSEMBLE/REMODEL the printer: If you do so, it may cause a fire, electric shock, or unsuspected problem. For checks / repair or other adjustment, ask sales representative, a dealer, or the service center.

Danger

How to Handle Lithium Battery:

- **Do not :** Stack battery cells together a it may cause fire hazard .

- **NEVER HEAT** or **DISPOSE OF** in a fire, considered for the same reason above.
- **NEVER DISASSEMBLE** or **DEFORM** with additional pressure as it may cause gas generation, causing harmful inhalation of gas for your nose or throat. In addition, deformation may cause taint damage because of liquid leakage or cause a fire due to heat generation, explosion, or ignition.

- **NEVER SOLDER** a cell. It may cause taint damage because of liquid leakage or cause a fire due to heat generation, explosion, or ignition.

- **DO NOT REFILL** a battery. If a combination of old and new cells is used or different types of batteries are mixed, it may cause a fire due to heat generation, explosion, or ignition.
- **POLARITY (+ and -) must be facing in the correct direction. Incorrect replacing the battery may damage the cell.**

- **STORE FIRMLY** the cell in the best place to keep children away for a chance to reach it. Should your child swallow it, consult a doctor nearby for appropriate treatment.

Installation for PC Card Battery/Replacement:

Let us exemplify PC card made of and recommended by SATO in here. Please read the operator's manual as well. *Note* that when the card other-than-recommended is used, data stored inside of the printer may cause disappearance.

1) Turn left 2 to 3 times the screw of battery-cell holder by its driver. Pull the holder toward you. *Note* that the battery holder is so designed that it can not completely be pulled out.
2) Set the cell with the plus mark upward. **Caution:** Touching the battery with your naked finger may cause improper connection.
3) Push the holder back and tighten the screw with its driver.

Reinforcement: a) Replace the battery periodically.
b) Initialize or card clearance when new PC card is to be used.
c) Our recommended PC card features a back-up function only temporarily when removing the battery, the function of which is to retain data.

Danger

How to Handle Head Detergent:

The agent is flammable. Heating it up or throwing it into the fire is ABSOLUTELY FORBIDDEN.

DO STORE at the best place, out of reach of children to avoid accidents.

If consumed, immediately go to the nearest Clinics for treatment

Connection for Optional Cable/Scanner:

Power of the printer should be turned **OFF** when the optional cable or scanner is to be connected to the printer. *Note* that if the printer is left in an ON condition when connecting optional peripherals, it may damage the device or the communication port due to short circuit.

Battery Pack/Power Unit:

- **DO NOT Dispose off** a battery pack or power unit. **DO NOT REMODEL** the battery pack.
- **DO NOT HEAT** or **THROW** the device into the presence of a fire. Any action causing short-circuit is NOT ALLOWED, either.
- **USE** specified charger for recharging the battery pack.
- **DO NOT WET** or **SOAK** the equipment in water or sea-water. If wet or soaked, it may cause heat to the cell or a rust to the terminal.

Power Unit/Battery charger:

- **USE** AC100V - 220V which is solely specified for this unit. If not, it may cause a fire or electric shock.
- **USE** specified charger when charging battery pack. If not, it may cause explosion in the cell, liquid leakage, a fire, or electric shock.
- **DO NOT DAMAGE** or **compress** DC cord. *Note* that a result of overload to the printer, overheat, cord-pulling, or any other process may cause a fire or electric shock.
- **DO NOT PROCESS**, intentionally **BEND**, **TWIST**, or **PULL** DC cord. If use the part in that state, it may cause a fire, electric shock, or unsuspected trouble.

	Warning
	DO NOT PLACE the printer at high humidity and condensation: When the printer is affected by condensation, immediately turn it OFF. Leave the printer until it **DRIES** again. *Note* that the continuous use of the printer with the condensation may cause electric shock.
   	How to Carry: - When moving the printer, **BE SURE TO PLUG OFF** and ENSURE TO CUT THE CONNECTION LINE OFF externally. If it remains connected, the cord and/or the line may damage, causing a fire or electric shock. - **DO NOT CARRY** the printer with paper set. If it is carried with paper, the supplys may be dropped, causing unexpected hurt or damage.
 	Power Supply: - **DO NOT TOUCH** the power cord with wet hand. It may cause electric shock. - **BE CAREFUL** when the power unit is heated.
 	Power Code: - **PLUG** should **BE AWAY FROM** thermal appliance. If the appliance is placed adjacent to it, the coating of plug may melt, causing a fire or electric shock. - **BE SURE TO HOLD** the **PLUG** when pulling the code out from the outlet. If the code is pulled , exposure of core wire or break may cause fire or electric shock.
	Cover: - **Be Careful** not to put your finger between the printer cover and the **base. Secure the cover properly to avoid accidents.**

Warning

Thermal Head:

- **BE CAREFUL** t head. This is because thermal head after prin ing becomes elevated temperatures.
- **BE CAREFUL** if touching the edge of thermal head by naked hands when changing paper or cleaning the head--some kind of injury may occur.
- **DO NOT CHANGE** thermal head by your routine. This may cause injury, burn, or electric shock.

Opening and Closing of Thermal Head:

- **BE CAREFUL** not to include any foreign materials other than paper when opening and closing the head. This may cause you hurt or damage to it.

Paper Setting:

- **BE CAREFUL**, when setting paper, not to put your finger on between paper and paper feeding portion.
- **BE CAREFUL** not to hurt when disengaging the cover of paper feeding opening.

When Not in Use for A Long Period:

- **PULL** power code **OUT** from the outlet for your safety when not in use.

When Cleaning:

- **PULL** power code **OUT** from the outlet for your safety when cleaning printer.

ATTENTION: PC CARD

- A used standard lithium cell (non-chargeable) shall be taken insulating measure, such as sealing with tape on both porlarities (plus and minus), and contact disposal contractor for industrial wastes.

BATTERY PACK

- To save resource for effective use, a used battery pack shall be taken insulating measure, such as sealing with tape on contact surfaces, and contact our sales representative or service staff for its disposal.
- **DO NOT MIX BATTERY PACK WITH OTHER CELLS.**

Warning

How to Handle PC Card:

- Battery shall be set before using PC card. If it is not set properly, data in the card can not be retained.
- **DO NOT DROP or BEND the PC Card , this may cause data lost**
- **DO NOT CONT ACT WITH WATER.** This may cause the data stored to be lost.
- **DO NOT EXPOSE to DIRECT LIGHT** or **PLACE AT OR NEAR HEATING EQUIPMENT**.
- **DO NOT TOUCH** the connector portion and **AVOID DUST** or **DIRT**. This may cause the data recorded to be lost.
- **DO NOT PLACE** in an environment with high temperature & humidity
- **PUT THE CARD INTO SOFT CASE** when transporting as to avoid static electricity.

Replacement of Battery Pack:

- **DO NOT USE** battery pack other than specified.
- Take note of the polarity - (positive and negative) when changing the battery. So **FOLLOW** the instruction. If not followed, the battery may leak or be damaged that will result you in hurt or injury, or perhaps smear in your working environment.
- **CONTACT** a dealer, sales representative office, or service centers **WHEN DISPOSING THE BATTERY AFTER REPLACEMENT**.
- For the package, **DO NOT IMPACT** or **THROW OUT**.
- **DO NOT USE** or **PLACE IN THE ENVIRONMENTS**, where the pack is exposed **BY DIRECT LIGHT**, or in a room, the inside of a car, or near the heating equipment **AT HIGH TEMPERATURES**. This may cause battery leak or degrade the performance and/or life of the battery.
- **BE SURE TO CHARGE** the battery before use for the initial exposure or when it is used prolonged.
- **KEEP FIRMLY AT LESS MOISTURE PLACE** when the pack is not used, so that it will prevent it from the battery leak or rust.
- **USE CLEANED-UP TERMINAL** by wiping it with dried cloth when the terminal of the battery pack becomes dirt. If **NOT CLEANED**, contact with equipment may degrade or it may cause the battery charge in trouble.

-

AWARENESS FOR PROPER USE:

How to Install and Handle Printer

INSTALL PRINTER ON A FLAT SURFACE.

If printer is installed on an uneven surface or slanted position, it may result in uneven print. This may also cause problems or shortened the life of the printer

INSTALL PRINTER AT FIXED PLACE.

If printer is installed at a place where vibration will occur, it may result in uneven print. This may also cause problems or shortened the life of the printer.

DO NOT INSTALL PRINTER IN AN ENVIRONMENT HIGH TEMPERATURE AND HUMIDITY.

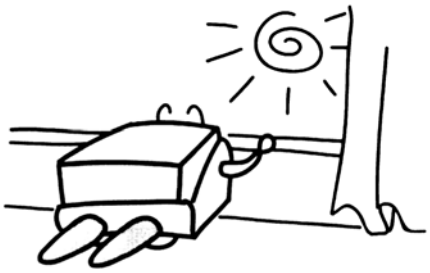
If printer is installed at high temperature and humidity,it may cause problems or shortened the life of the printer.

KEEP PRINTER AT ENVIRONMENT WITHOUT DUST.

If printer is installed at a place with a great amount of dust, it may result in uneven print. This may also cause trouble or shorten the life of the printer.

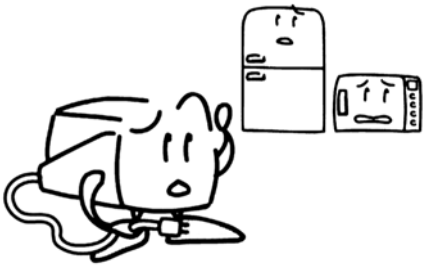
AVOID DIRECT SUNLIGHT.

Because the printer uses optical sensor, the sensor may malfunction when it is exposed by direct light. CLOSE THE COVER when printing.



DO NOT SUPPLY POWER FROM THE OUTLET NEAR HEATER OR REFRIGERATOR.

If power is supplied from household electric appliances with a large amount of consumption power, it may cause problem / malfunction due to a voltage drop.



DO NOT INSTALL PRINTER AT A PLACE BOTH SIDES OF THE PRINTER ARE BLOCKED.

Space 15cm or over between two surfaces of walls and both sides of the printer when printer is installed. If NOT SPACED, it may cause trouble or shorten the life of printer due to heating.

DO NOT PUT PRINTER UPSIDE DOWN.

If printer is put upside down with the paper set in order to fix power unit or battery pack, the paper may be dropped or stacked in the machine. This installation may also cause paper to be tored or creased, resuting in uneven print.

SECTION 1: SPECIFICATION

SPECIFICATION

PRINT		
Model	HT200e	
Print Method	Direct Thermal	
Printer module	0.125 mm	(0.0049")
Resolution	203 dpi	(8dpmm)
Speed	60 or 80 mm/s	(2.4"/s or 3.1"/s)
	*60mm/s when used with battery	
Print Area (Max)	48mm (1.89") W x 96mm (3.78") L	
MEDIA		
Normal		
Width	25.4 ～ 48.0 mm	(0.98" ～ 1.89")
Width (Backing Paper size)	28.0 ～ 51.0 mm	(1.10" ～ 2.01")
Pitch	13.0 ～ 100.0 mm	(0.51" ～ 3.94")
Pitch (Backing Paper size)	16.0 ～ 103.0 mm	(0.63" ～ 4.06")
Caliper	0.14 ～ 0.19mm	(Thickness)
Dispense		
Width	25.4 ～ 48.0 mm	(0.98" ～ 1.89")
Width (Backing Paper size)	28.0 ～ 51.0 mm	(1.10" ～ 2.01")
Pitch	25.4 ～ 48.0 mm	(0.98" ～ 1.89")
Pitch (Backing Paper size)	25.4 ～ 50.0 mm	(0.98" ～ 1.96")
Caliper	0.14 ～ 0.19mm	(00055" ～ 0.0075")
Roll Outer diameter (MAX)	75mm	(2.95")
Core Inner diameter (Min)	26.5mm	(1.1")
Wind	Face-In or Face-Out	
PRINTER		
Sensor type	Reflective sensor for use with pre-printed sensing eye-marks	
Operational Panel Switch	FNC1, FNC2, FMT, PGUP, RCL. AC, 0 ～ 9,	
	SHIF, SET, FEEDS/S, ENTR, DEL, DATE, #, $!"	
Self Diagnosis Checking	Cover open, Paper end, Head check, Test print, Battery check	

	PC card battery check (Memory card battery life is 2 years)
LCD Display	16 Character x 3 Line Alphanumeric
Keypad	11key Alphanumeric + 12 Function +Cursor Control + Enter
Dispense Stop	Adjustment Panel (VR1)
Print Position	Adjustment Panel (VR2)
Reflective Sensor	Adjustment Panel (VR3) Don't move
Dispense Sensor	Adjustment Panel (VR4) Don't move
LCD Brightness	Adjustment Panel (VR5) PCB
INTERFACE CONNECTIONS	
General Specification	
Asynchronous ASCll	Half-duplex communication
	Ready/Busy Hardware Flow Control
	Pin 9, DTR Control
	Pin 4, RTS Error Condition
	X-On/X-Off Software Flow Control
	Bi-Directional Communication
Data Transmission Rate	4800,9600,19200 bps
Character Format	1 Start Bit (fixed)
	7 or 8 data bits (selectable)
	Odd, Even or No Parity (selectable)
	1 or 2 Stop bits (Selectable)
ELECTRICAL SPECIFICATIONS	
Connector	DB-9S
Cable	DB-9P (Male), 15m maximum length
	For cable configuration, refer to Cable
	Requirements appropriate to the RS232C
	Protocol chosen.
Signal Levels	High = +5V to +12V
	Low= -5V to -12V
PROCESSING	
CPU	32bit RISC
NV memory	512K Bytes Flash ROM
Optional Memory	2MB SRAM PCMICA Card

DIMENSION		
PRINTER		
Size	W 132mm X D 230mm X H 151mm (W 5.2" X D 9.2" X H 6")	
Weight	2.5 kg (5.5lb) with Optional Battery Pack installed	
	2.4 kg (5.3lb) with AC Power Adapter installed	
Adapter		
Size	W 130mm X D 117mm X H 28mm (W 5.2" X D 6" X H 1.1")	
Weight	330g	
Power Requirements		
Input Voltage	AC 110 / 230 V ±10%	
Output Voltage and current	DC8.4V 3.2A	
Power Consumption	Maximum 71 VA 43W	
ENVIRONMENT		
Operating Temperature	5 ～ 40 ° C	41 ～ 104 ° F
Strange Temperature	-5 ～ 60 ° C	23 ～ 140 ° F
Operating Humidity	30% ～ 80%	Non-condensing
Strange Humidity	30% ～ 90%	Non-condensing
REGULATORY APPROVALS		
Safety	CE, TUV, UL, CSA, CCC	
RFI/EMI	FCC Class B	
BARCODE SYMBOLOGIES		
Liner	EAN8, EAN13, UPC-A/E, NW-7, Inter-leaved 2 of 5	
	CODE39, CODE128B/C	
MATRIX FONTS		
X1	20 dots x 50 dots H	
X2	8 dotsW x 20 dots H	
X3	13 dotsW x 21 dots H	
OCR-B	20 dotsW x 24 dots H	
Price	16 dotsW x 24 dots H	
POP1	28 dotsW x 48 dots H	
POP2	48 dotsW x 68 dots H	
POP3	26 dotsW x 56 dots H	

CHARACTER CONTROL		
Expansion	Up to 4X in either the X or Y coordinates	
Rotation	0˚ ,90°,180°,or270°	
Pitch	0 to 9 dots	
OTHER FEATURES		
Memory Storage	Fixed FMT: 29	Free FMT: 15
	Preset Approx.300	(Internal Memory)
	Approx.2000	(Option: 2MB SRAM card memory)
Sequential Numbering	Sequential numbering of both numeric and barcodes.	
Custom Characters	UP to 24 Currency Mark	
Graphics	BW Graphic files in BMP format	
Real Time Clock	Day, Month, Year	
Option		
Battery; Battery charger; PCMCIA card; Rewinder; Unwinder; Touch/Pen scanner; RS232C Cable		

SECTION 2: INSTALLATION AND SETUP

INTRODUCTION

This section is to assist you in setting up the HT200e in the application environment. The following information is provided in this section.

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- SCREEN FOR CONSUMPTION TAX RATE SETTING
- SWITCHING TO ENGLISH CURRENCY
- DISPLAY ON THE CONTENT OF PRINCE INSERTION

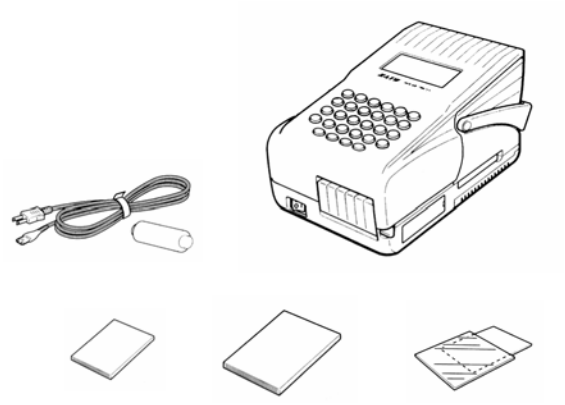
WHAT YOU GET

Consider the following when unpacking the printer.

- The shipping container should stay right side up.
- Lift the printer straight up and out of the box.
- Remove the two shipping restraints.
- Remove the plastic covering from the printer.
- Remove the accessory items from their protective container.
- If the printer has been stored in a cold environment, allow it to reach room temperature before powering it on.
- Set the printer on a solid flat surface. Inspect the shipping container and printer for any signs of damage that may have occurred during shipment.

The HT200e Thermal printer comes packed in a protective carton. Included in the carton case the following items:

- HT200e Printer
- Quick Guide
- CD ROM
- Head Cleaning Sheet
- Power Cable and Reel holder

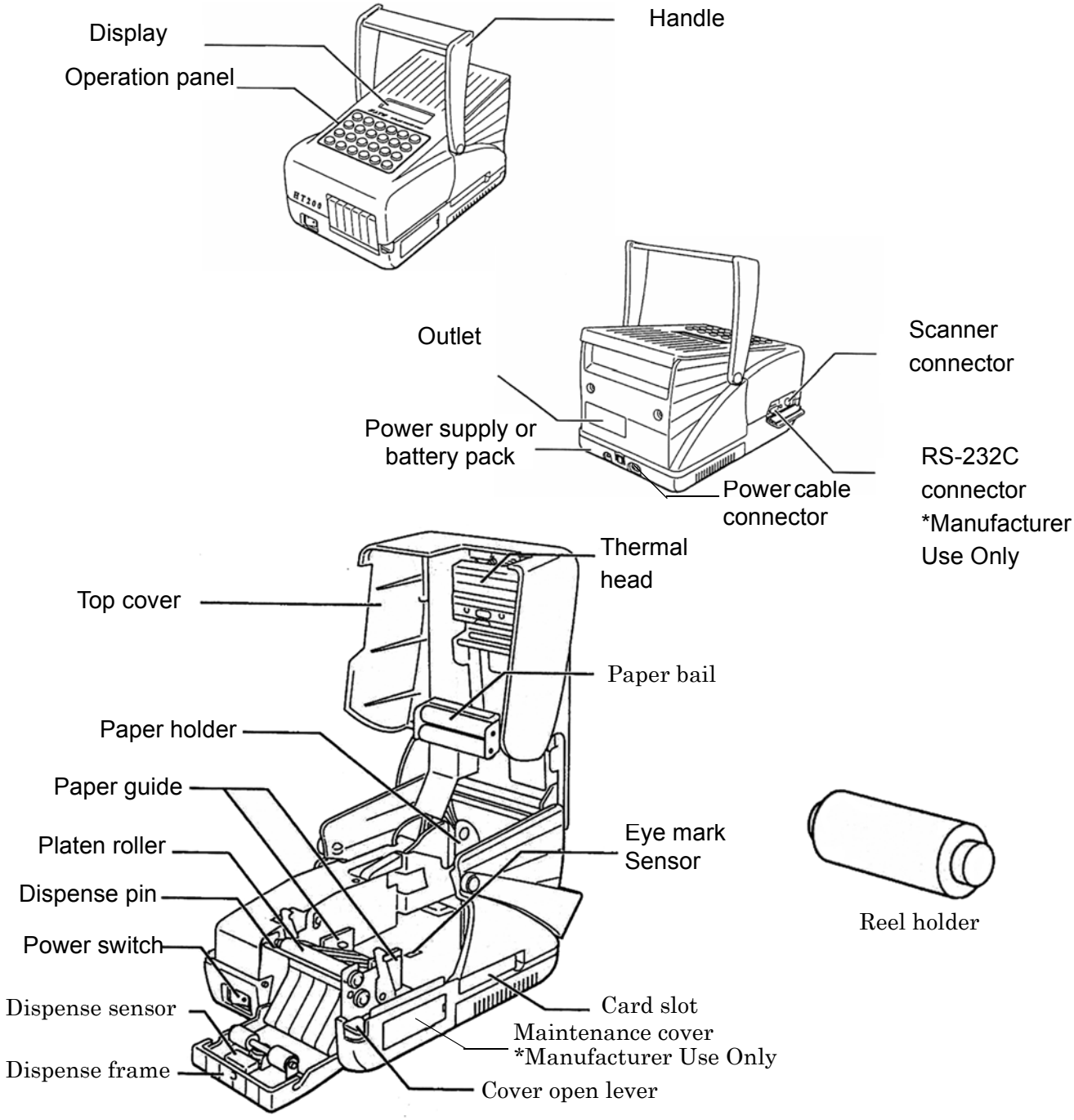


After taking the HT200e from the carton and removing the plastic cover, it is ready for installation.

Consider the following when setting up the printer.

- Locate a solid flat surface with adequate room to set the printer. Make sure there is enough room above the printer to provide clearance for loading labels, reading the LCD screen and accessing the keypad.
- If the printer is to be used in conjunction with a host computer or terminal, the maximum distance for RS232C cables is10 m. Cables can be purchased locally and their configuration will depend upon the host system.
- For information on interfacing the printer to a host system.
- If the printer is to be used with an AC Adaptor, make sure that the proper power source is available.

NAMES OF INDIVIDUAL PARTS

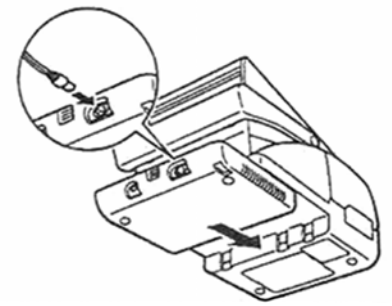


POWER ASSY

MAIN ELECTRICAL CONNECTION

Unless a battery pack is in use the printer must be connected to a 100-220-volt power supply.

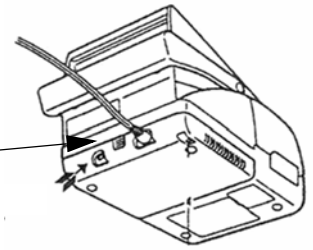
1. Connection of the Power Supply to the Main Unit.
   Set the Power Supply to the groove of the main unit.



2. Insert it by sliding forward until you hear it click.
   To remove it, push the lock of the power supply down and slide towards you.

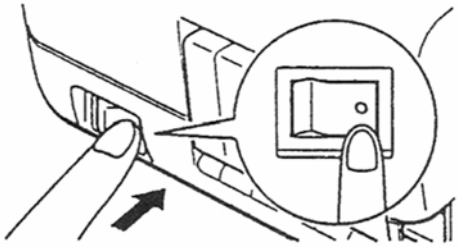
CAUTION

Do not attempt to remove the black plug.
Doing so invalidates the warranty.



3. Connection on the Wall Outlet side.
   Insert the power supply plug into the wall outlet.
   After inserting power supply plug into the wall outlet, be sure to connect the printer ground wire to the ground; otherwise, electric shock may occur.

4. Power Switch
   Turn on the power switch.
   In the initial setting step, set the power source to the Power Supply.



CAUTION

After prolonged use the power supply may become warm.
This is normal after five or six rolls of labels have been printed continuously.

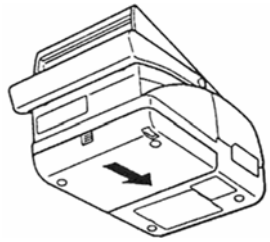
BATTERY PACK CONNECTION

If you want to use the printer where no wall outlet is available, connect the optional battery pack.

IMPORTANT !!

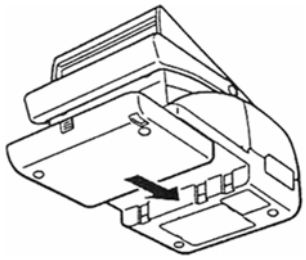
*1. Charge the battery pack before using it for the first time.
*2. After following this procedure, set the power type on the "Battery" in the initial setting step.

1. Set the battery pack to the groove of the Main Unit.



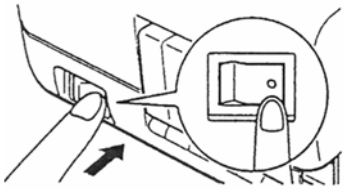
2. Insert it by sliding forward until you hear it click.

   *To remove it, push the lock of the battery pack down and slide it towards you.



3. Turn on the power switch.
   The power to be used must be set on the "Battery" in the initial setting step.

   *This printer has a function that power is automatically turned off if operation is not performed for five minutes or more after the power-switch is turned on (Auto Power Off Function). This function must be set to minimize battery consumption.



CAUTION ABOUT BATTERY PACK

When you do not use this equipment for a long time, charge it once or twice every 3 months. This will minimize battery consumption.
When you do not use this equipment, be sure to turn off the switch. This will minimize battery consumption.
The battery can be used at the normal temperature by repeating charging about 300 times. After repeating charging about 300 times, the label will not be issued or the number of label s issued will be reduced. In this case replace by a new one.
The number of labels issued will be changed according to charging or temperature. When the equipment is used at the normal temperature, the number of labels issued will be about 4000(5rolls) in the case of labels with are 25mm(pitch) x32mm (width).

CHARGING BATTERY PACK

The output voltage of the battery pack is reduced as it is being used.
Reduced output voltage will lead to reduction in the number of labels to be issued, or will disable the label to be issued.
The battery must be charged if the following screen appears when the power of this equipment has turned on or during issue of labels.

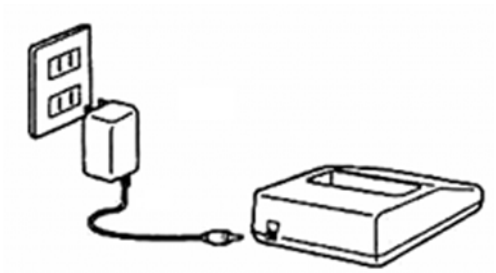
Screen indicating the remaining battery power.

BATTERY FULL	• The battery is fully charged.
CHARGE PWR PACK	• Charge the battery. It is getting flat.
PRINT BATT LOW	• To start printing, charge the battery. (The buzzer will sound for several seconds, and power will be turned off automatically in several minutes.)

1. Turn off the power of the main unit.

2. Remove the battery pack from the main unit.

*To remove it, push the lock of the battery pack, and slide it towards you.

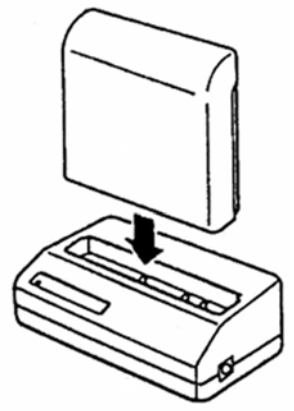


3. Prepare the battery charger (optional)

*Insert the battery charger DC plug into the main unit of the battery charger.
*Insert the battery charger power plug into the outlet.

4. Set the battery pack to the battery charger.

*When the battery pack is set, the battery charger lamp will light up in red.
*Charging time is about 150 minutes when fully charged, though it may vary according to battery conditions.
When charging is completed, the lamp will light up in green.



IMPORTANT !!

If the battery charger lamp flashes on and off in red during charging, the battery pack is faulty. Stop charging and replace the battery pack with a new one.

DISCHARGING BATTERY PACK

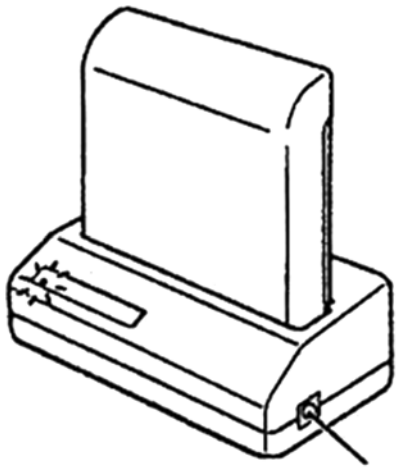
Continued use of the battery pack will reduce the chargeable volume.
To prevent this, discharge the battery pack about every 20 times of charge.
This will recover the chargeable volume, and will allow the printer to be used for a longer time.

1. After following steps 1 to 4 in "Charging the battery pack", press the DISCHARGE button.

*Pressing the DISCHARGE button will cause the battery charger lamp to flash on and off in green (discharge for about 8.5 hours). Then the lamp will light up in red (charge for about 2.5 hours).

*The maximum charging time is about 11 hours, though it may vary according to battery conditions.

*After charging, the battery charger lamp will light up in green.



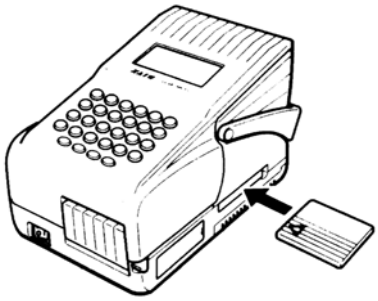
DISCHARGE button

INSTALLING OPTION

INSTALLING THE MEMORY CARD

To register the preset data, you can use the PC card.

How to set the PC card



IMPORTANT !!

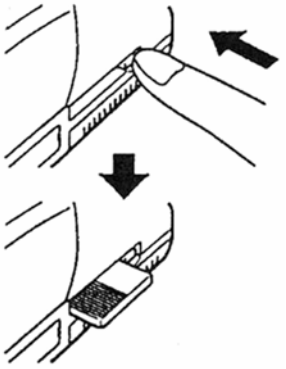
Before using a new PC card, clear it.

1. Turn off the main unit power.

2. Open the card slot cover in the upward direction on the right side of the main unit, and insert the PC card in it. With the "△" marked side of the PC card facing upward, insert it in the illustrated direction.

IMPORTANT !!

If you force the card into position by reversing the direction, the main body of the card and main unit connector may be damaged.
Sufficient care must be taken to prevent it.



Remove the PC card

1. Press the Ejector button on the right side of the slot.

2. The PC card will be ejected slightly, so pull out the PC card.

- Before inserting or removing the PC card, be sure to turn off power of the printer main unit otherwise, the PC card, circuit board or main printer may be damaged.
- If the PC card is not set, keep the card cover closed to prevent entry of foreign substances.

INSTALLING THE INTERFACES

The HT200e has two interface connectors located inside a compartment on the Front left side of the printer. Opening the compartment door and swinging down access them.

INSTALLING THE RS232C

A DB-9F connector is used to interface the HT200e to a host using serial RS232C communications. It can be selected to operate at 4800,9600 or 19200 bps, 7 or 8 datas bits, odd, even or not parity, and Ready/Busy or X-on/X-off flow control. See Page 43 for procedures on setting up the serial interface procedures.

INSTALLING SCANNER

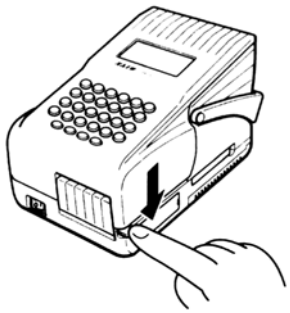
A Mini-Din 8-F connector is used to interface the HT200e to an optional scanner. The scanner can be used in input variable data by reading bar code symbols from a menu sheet.

LOADING THE LABELS

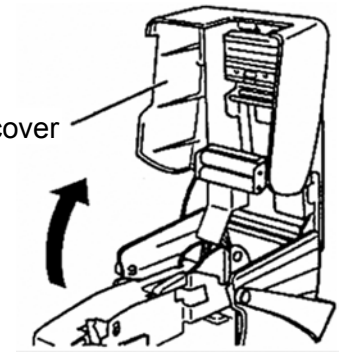
This printer will produce labels in two modes: "continuous or dispense"

- For continuous follow steps 1 to 7.
- For dispense follow steps 8 to 13.

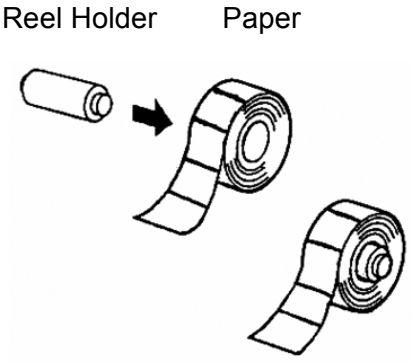
1. Press the cover open lever on the right side of the printer.



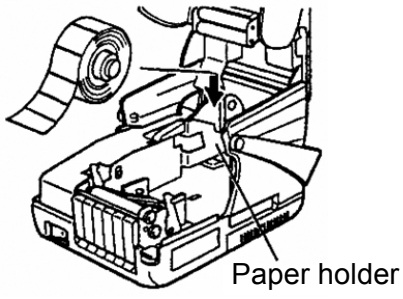
2. Open the top cover by pulling it upward.



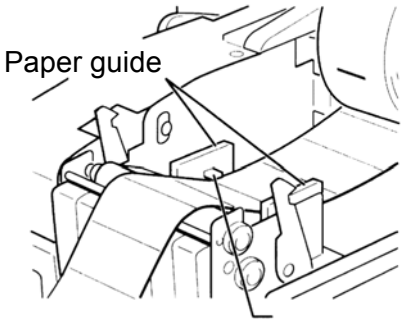
3. Place paper on the reel holder.



4. Set paper to the paper holder. The paper must be set with the printed side facing upward.

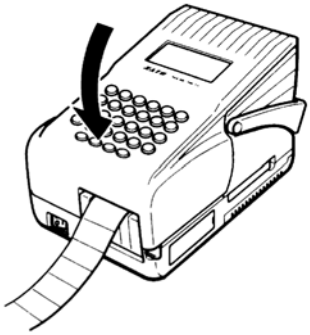


5. Pass paper through the paper guide.



6. Close the paper guide according to paper size.

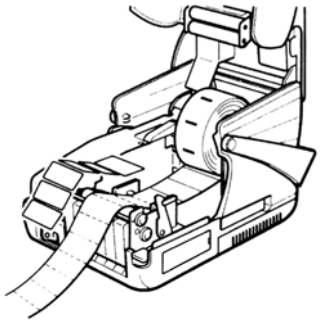
When in continuous mode



7. Protrude the paper tip 5 to 6 cm from the main unit and close the top cover.

*Close it firmly until you hear it click.

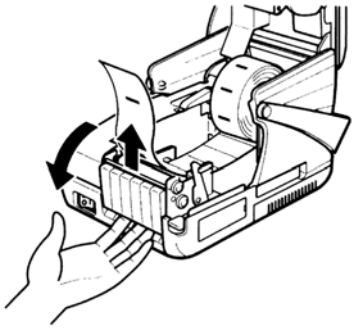
When in dispense mode



8. Make sure that you have already followed steps 1 to 5.

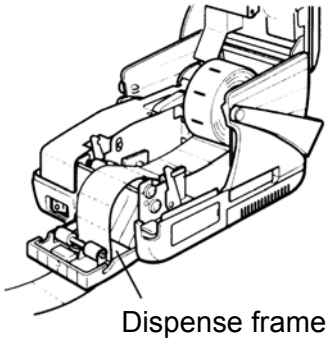
9 Peel 5 or 6 labels off the backing paper.

10.Push up the dispense frame on the front of the main unit and open it.



11.Pass the backing paper through the opening of the dispense frame from the top of the dispense pin.

*Do not pass it between the dispense pin and the platen roller.



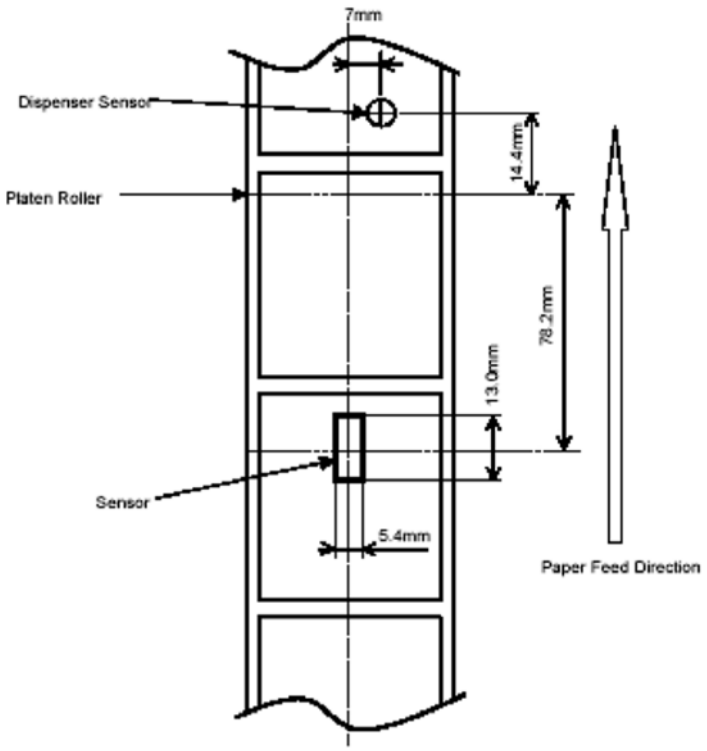
12.Close the top cover

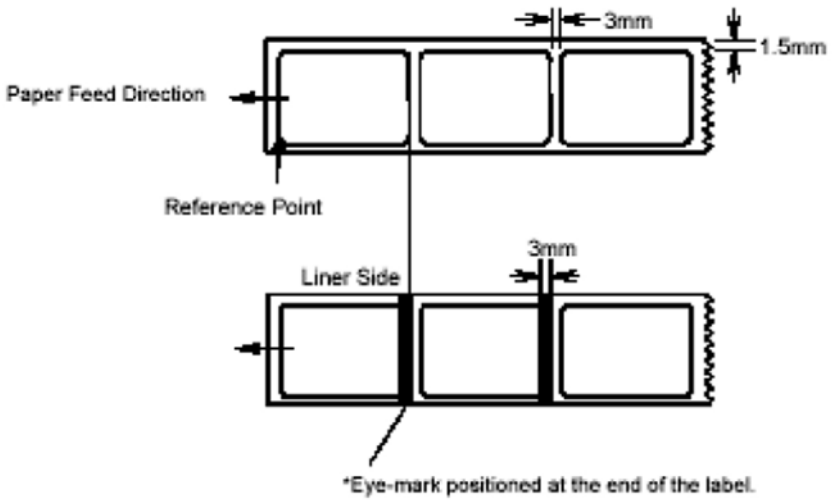
*Close it firmly until you hear it click.

13.Press down the dispense frame and close it.

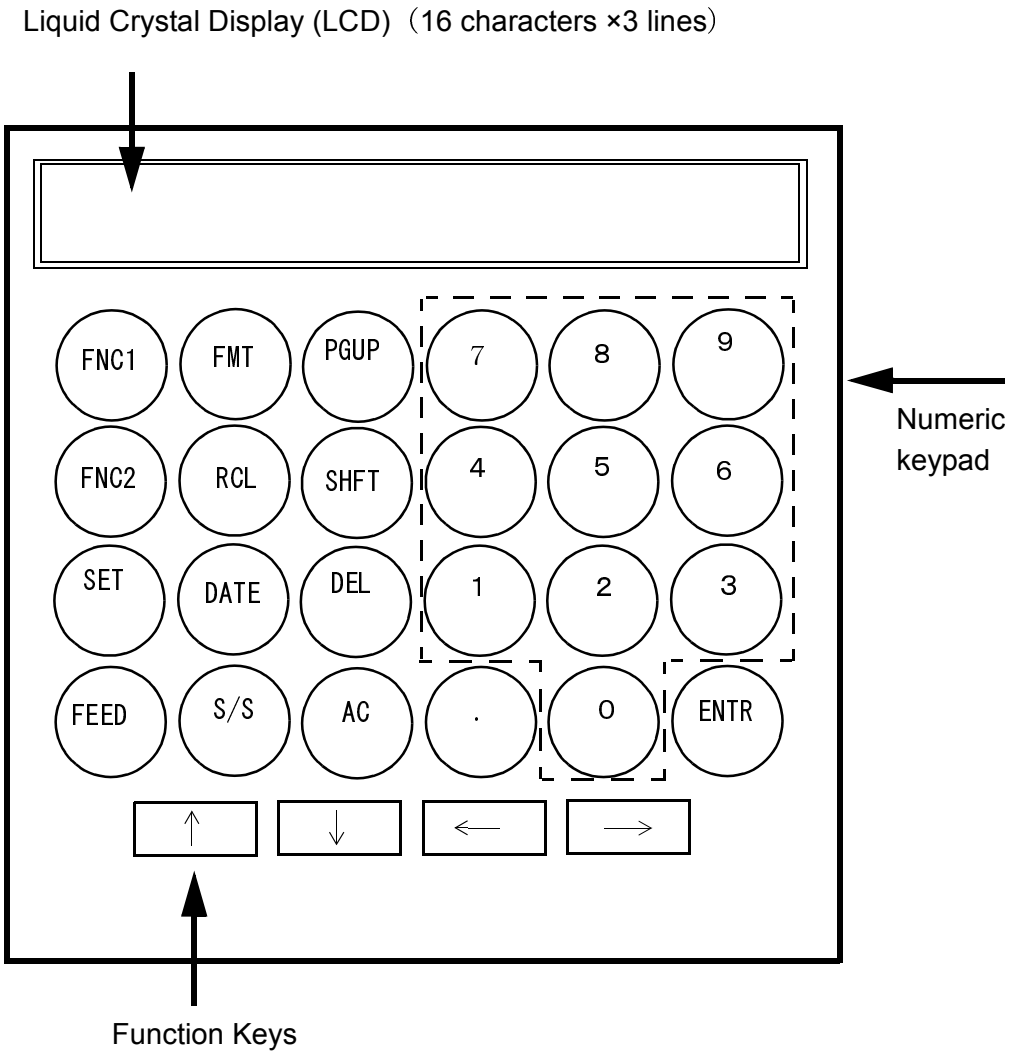
LABEL SENSORS

The HT200e labels are center justified and the label pitch can be sensed using a black eye mark located on the backside of the label (or label liner). A dispenser sensor detect when a label is in the dispenser. The printer will not print another label if a peeled label has not been removed.





OPERATION PANEL

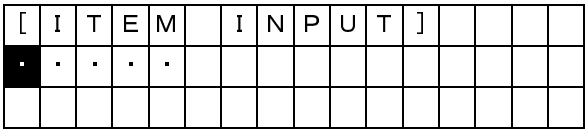


Numeric keypad	0 to 9	Numeric value, English, and symbol are to be entered.
Function keys	FNC 1	For changing to British Pound (GBP) and entering unit volume, a simplified display wll be supplied. When it is pressed from the display of entering the print format number, it will appear a display to process table data. Where the user-maintenance mode and the screen for the set-up of print density are situated, the density for black and red is made switchable.
	FMT	Will return to a display of entering the label format number.
	PGUP	Will go back to previous display.
	FNC 2	A display that sets the rates for discount, exchange for Euro, and consumption tax will appear. On the display for the label format number entry, the name for label and format can be provided.
	RCL	Will move to a display for the preset function. Once some letter is typed, it proceeds to a code-entry display. For the entry of table data for the normal field, where it is pressed after entering table number, the already registered data for table will come up.
	SHFT	Uppercase/lowercase can be interchanged. It can scrolle the guidance. When it is pressed from the display for entry of the registry format number, number and name for the format, and entry for label name can be changed.
	SET	Type of letters can be switched.
	DATE	Where it is pressed when turning the power “On”, a display to set a calendar will be supplied. A calandar in a printer can be displayed when pushed while being standby.
	DEL	Will delete one character entered.
	FEED	Will feed a piece of label.
	S/S	One-stop and reprint can be operated, in which the labels are printed continuously. It stops for the printing of dispense.
	AC	Data entered can be cleared.
	ÅD	Symbol can be entered. When it is pressed from the display of the lable format number, it calls in a display to precess the issuance of history.
	ENTR	Will establish data entered and go to next screen.
	[→] [←] [↓] [↑]	The arrows take four directions as shown. It provides table data already registered in scroll model.

AN EXAMPLE OF ENTRY FOR CHARACTER

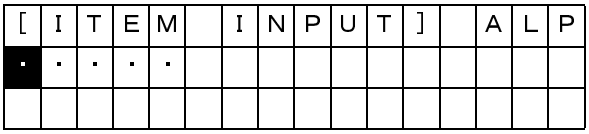
Item name “BD” will be entered: (Initial mode for entry is numeric value.)

1



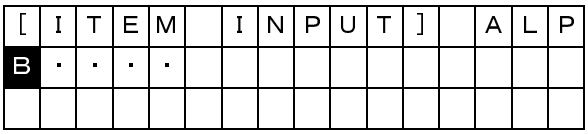
Press [SET], so that it displays ALP. It shows that it is a mode of entry in English.

2



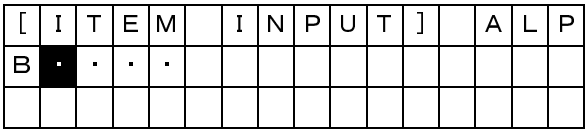
Press [2] twice, so that it displays “B”.

3



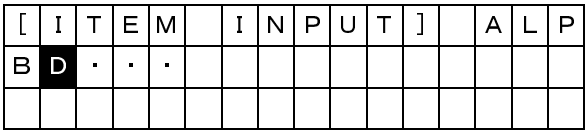
Press [→], so that it moves the cursor.

4



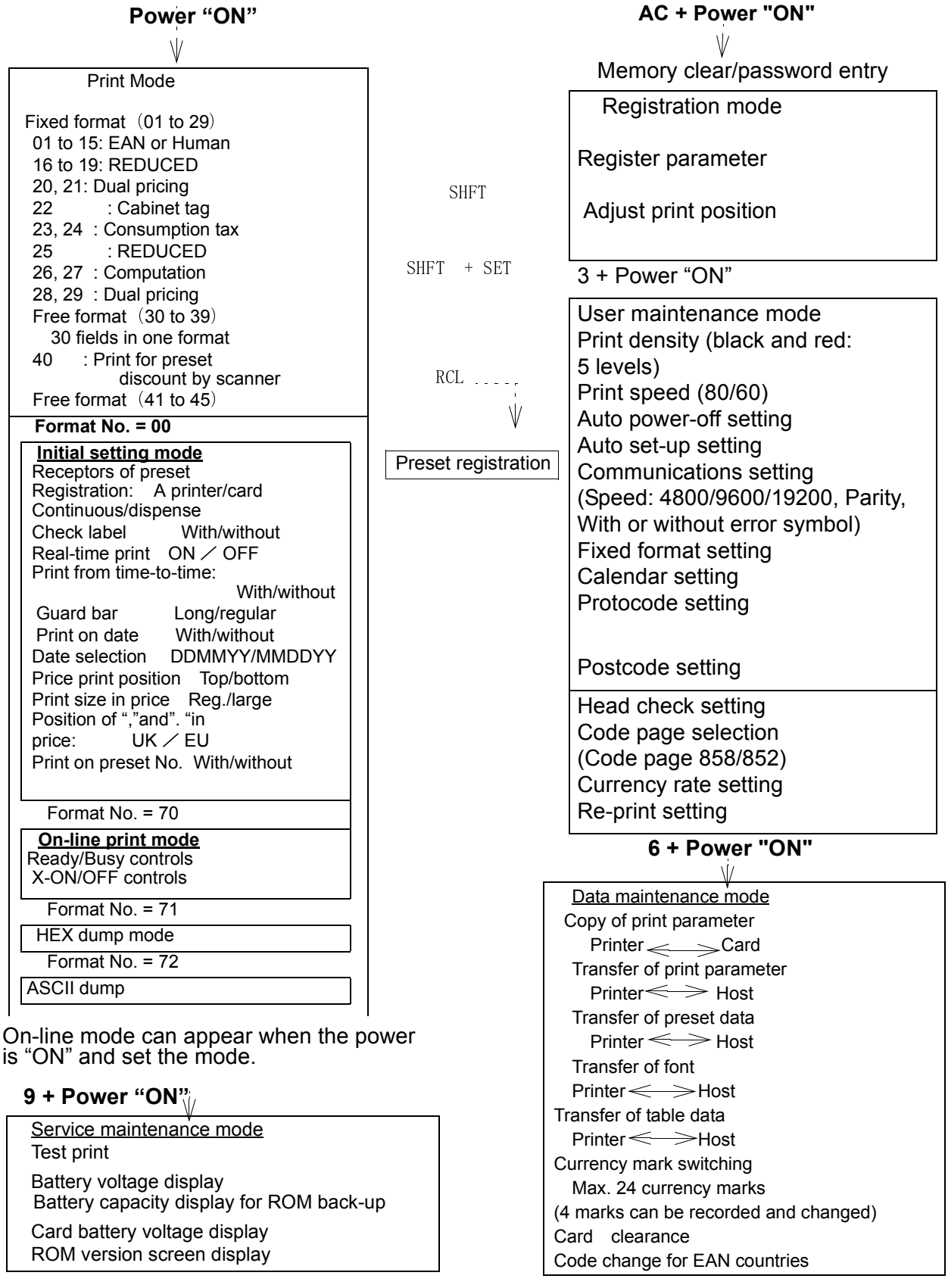
Press [3], so that it displays “D”.

5

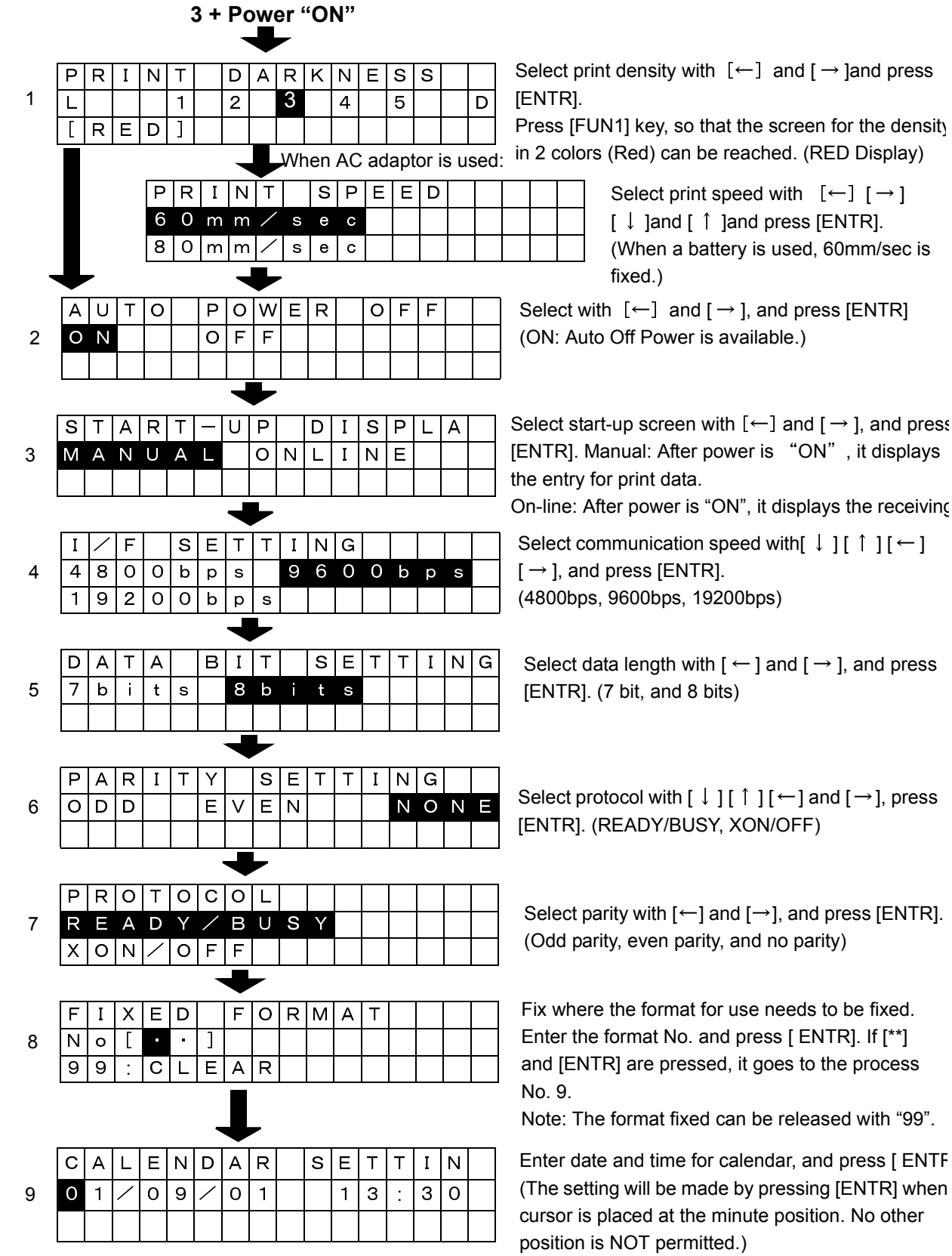


Through these steps, “BD” entry will be terminated.

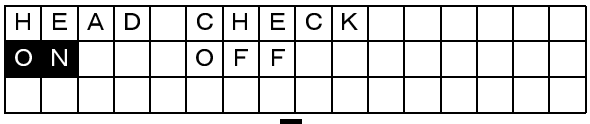
SCREEN LAYOUT



PROCESS ON THE SCREEN FOR USER MAINTENANCE MODE

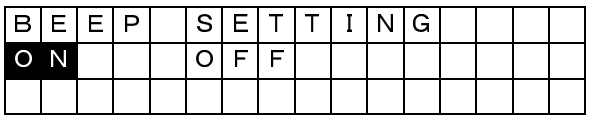


10



Select with [←] and [→], and press [ENTR].
(ON: Head check is available.)
(OFF: Head check is NOT available.)

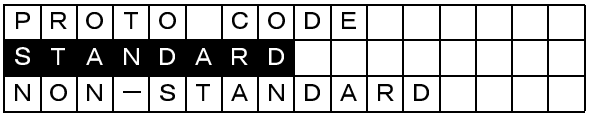
11



Select with [←] and [→], and press [ENTR].
(ON: If selected, sound that keys are entered can be heard.
(OFF: If selected, keys that are entered make sound in silence.)

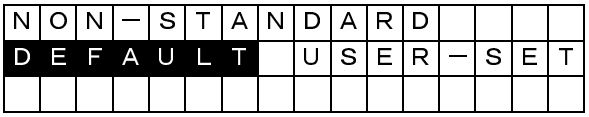
For protocode setting:

12



Select Standard or not with [↓] [↑] [←] and [→], and press [ENTR]. Where Standard is determined, it goes to the process No. 15. Whereas Non-standard is chosen, it goes to the process No. 13.

13



Code can be chosen for Non-standard:
Select DEFAULT, and press [ENTER] so that it will terminate the setting for PROTO CODE. Where User-set is selected, follow the next screen.

14

For User-set, STX screen initially appears:
Enter Hex data and value in 2 digits for the STX code.
Enter value from 0 to 9 with keypad, and use arrow (up and down) for A to F. Note that any other keys ar not available. When finishing STX setting, press [PGUP] key so that it goes to ETX setting screen.
The table in the following shows the order of code that will be set.

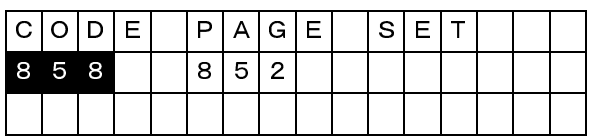
When last code has been set, it will terminate PROTO CODE to be set.

A table of PROTO CODE:

Name	Standard	Non-standard See Note 1.
STX	02H	Setting by user is available.
ETX	03H	Setting by user is available.
ESC	1BH	Setting by user is available.
EOT	04H	Setting by user is available.
SOH	01H	Setting by user is available.

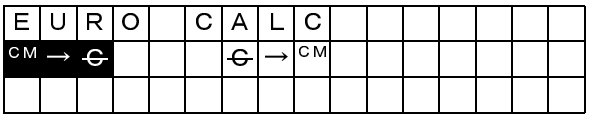
Note 1) Default code for non-standard is standard code.

15



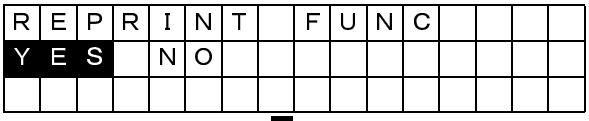
Code page can be selected:
858: Code page 858
852: Code page 852

16



The method for calculating currency rate can be chosen.

17



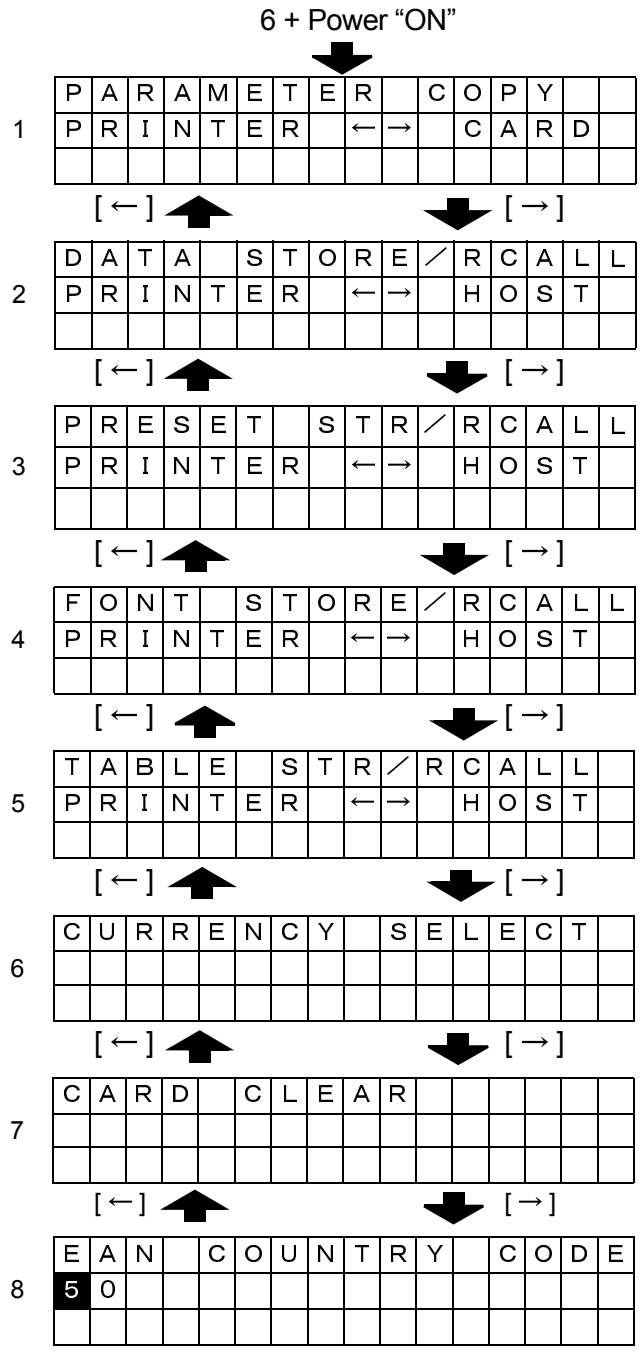
Whether function to re-print is available or not can be selected:YES: Reprint (Default)
NO: No reprint.

The process No. 1

Note: For each screen, press [FMT] so that it goes back to the process No. 1. Turn the power “ON” again if print mode is required.

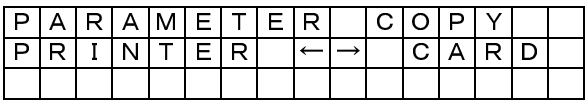
PROCESS ON THE SCREEN FOR DATA MAINTENANCE MODE

1. Copy for print parameter (From a card to a printer, or opposite direction)
2. Transfer for print parameter (From a card to a printer, or opposite direction)
3. Transfer for preset data (From a card to a printer, or opposite direction)
4. Transfer for font (From a card to a printer, or opposite direction)
5. Transfer for table data (From a card to a printer, or opposite direction)
6. Setting for currency mark
7. Card clear
8. Code setting for EAN country

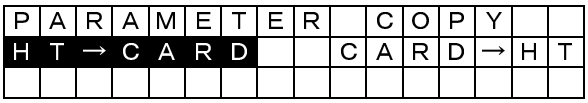


PROCESS ON THE SCREEN FOR COPY OF PARAMETER

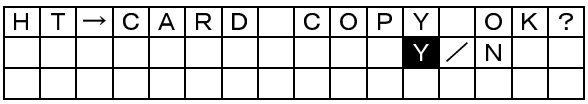
6 + Power “ON”



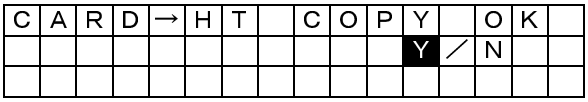
1 Press [ENTR], so that it goes to the screen for the selection of copy.



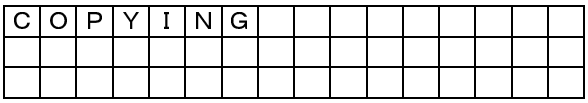
2 Move with [←] and [→], and select the type of. copy Press [ENTR], so that it goes to the screen for the confirmation of initiating copy.



Or:



Press [ENTR]:
“Y” is to start copying.
“N” is to return to the process No. 1.

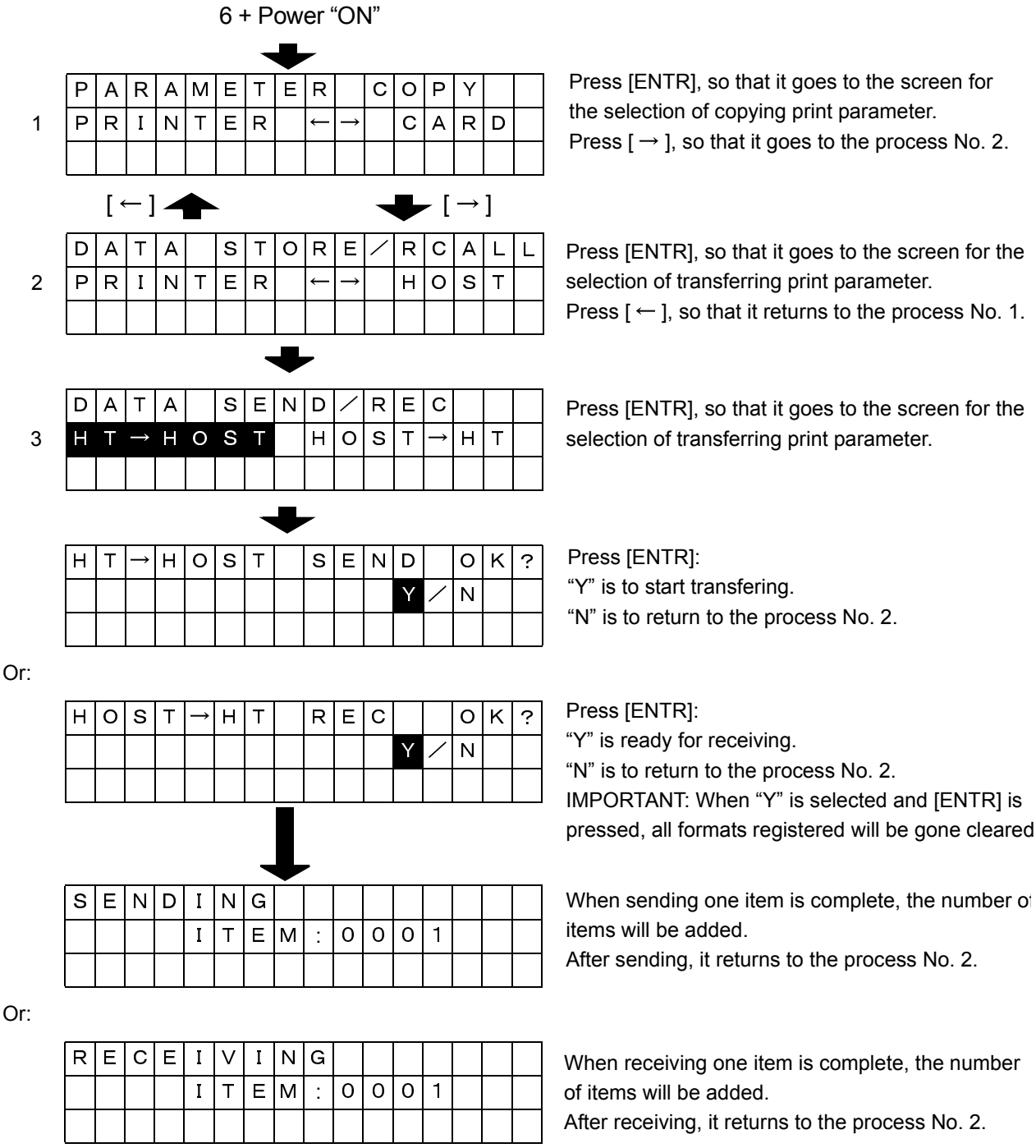


When completing copy, it returns to the process No. 1.

In the copy for parameter, copy will be made from a printer to a card and from a card to a printer, for print parameter, preset, currency mark font, and table data.

Note: Memory card should be set before turning the power “ON”.

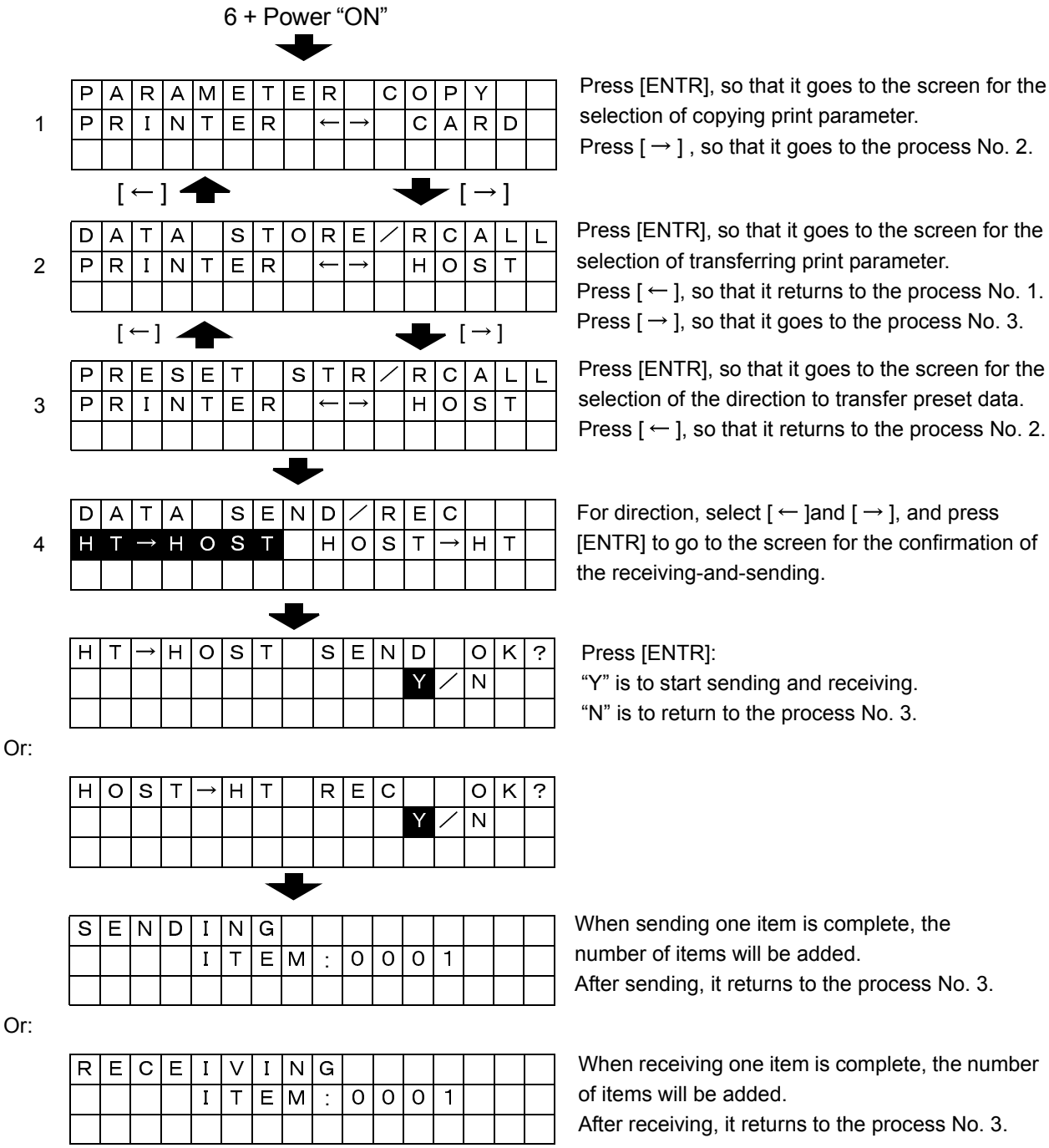
PROCESS ON THE SCREEN FOR TRANSFER OF PRINT PARAMETER



Print parameter that is transferred from a host computer will be registered in a printer. The parameter registered in the printer can be transferred to the host.

Note: When print parameter is transferred, on-line cable must be connected to the host before turning the power "ON".

PROCESS ON THE SCREEN FOR TRANSFER OF PRESET DATA



Press [ENTR], so that it goes to the screen for the selection of copying print parameter.
Press [→] , so that it goes to the process No. 2.

Press [ENTR], so that it goes to the screen for the selection of transferring print parameter.
Press [←], so that it returns to the process No. 1.
Press [→], so that it goes to the process No. 3.

Press [ENTR], so that it goes to the screen for the selection of the direction to transfer preset data.
Press [←], so that it returns to the process No. 2.

For direction, select [←]and [→], and press [ENTR] to go to the screen for the confirmation of the receiving-and-sending.

Press [ENTR]:
"Y" is to start sending and receiving.
"N" is to return to the process No. 3.

Or:

When sending one item is complete, the number of items will be added.
After sending, it returns to the process No. 3.

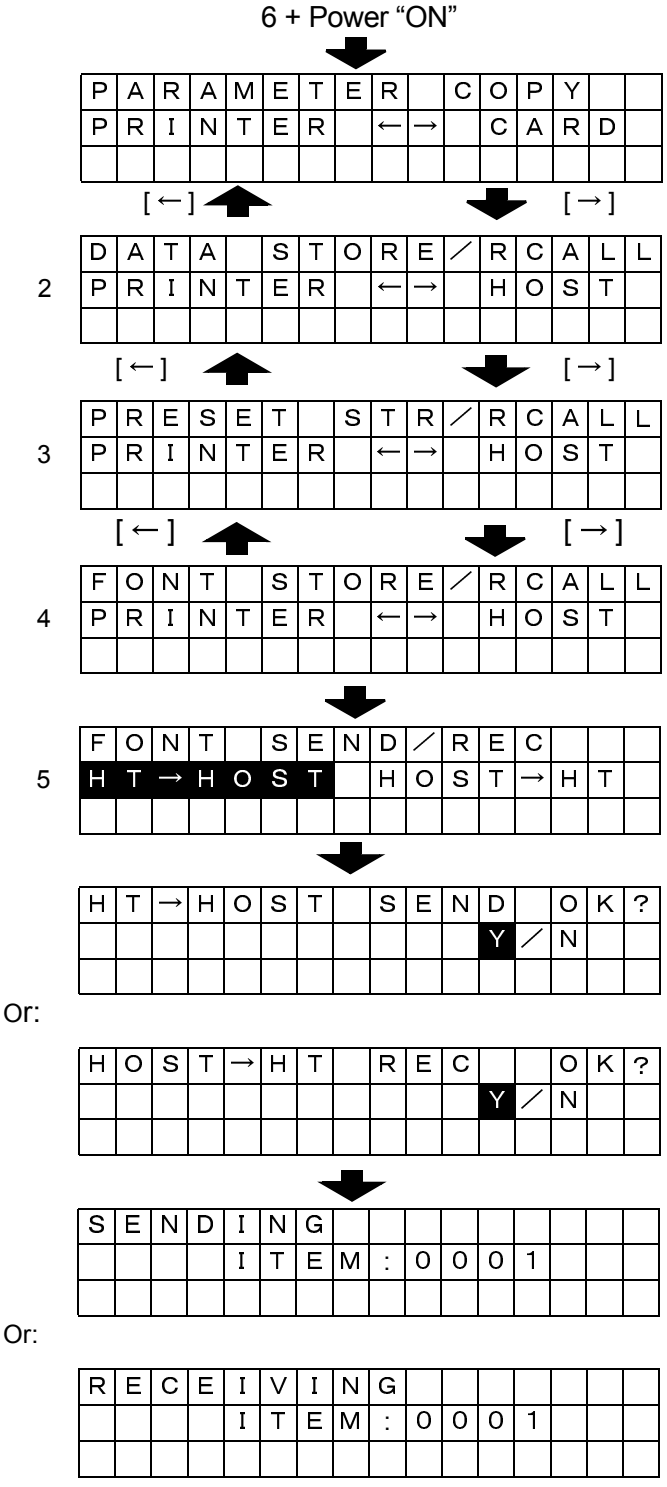
Or:

When receiving one item is complete, the number of items will be added.
After receiving, it returns to the process No. 3.

Preset data that are transferred from a host computer will be registered in a printer. The data registered in the printer can be transferred to the host.

Note: When preset data is transferred, on-line cable must be connected to the host before turning the power "ON".

PROCESS FOR TRANSFER OF FONT ON THE SCREEN (CURRENCY MARK FONT)



Press [ENTR], so that it goes to the screen for the selection of copying print parameter.
Press [→], so that it goes to the process No. 2.

Press [ENTR], so that it goes to the screen for the selection of transferring print parameter.
Press [←], so that it returns to the process No. 1.
Press[→], so that it goes to the process No. 3.

Press [ENTR], so that it goes to the screen for the selection of transfering preset.
Press [←], so that it returns to the process No. 2.
Press[→], so that it goes to the process No. 4

Press [ENTR], so that it goes to the screen for the selection of transfering font.
Press[←], so that it returns to the process No. 3.

For the transfering direction, select [←] and [→], and press [ENTR] to go to the screen for the confirmation of the transfer.

Press [ENTR], so that it goes to the screen for the selection of transfering preset.
Press [←], so that it returns to the process No. 2.

Or:

Press [ENTR]:
"Y" is to start transferng.
"N" is to return to the process No. 4.

When sending one item is complete, the number of items will be added.
After sending, it returns to the process No. 4.

Or:

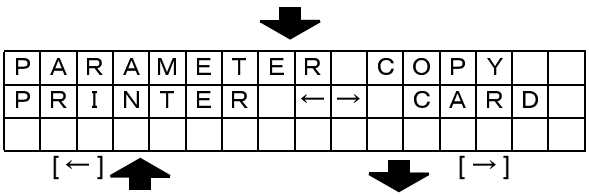
When receiving one item is complete, the number of items will be added.
After receiving, it returns to the process No. 4.

Font for currency mark that is transferred from a host computer will be registered in a printer. The font registered in the printer can be transferred to the host.

Note: When font for currency mark is transferred, on-line cable must be connected to the host before turning the power "ON".

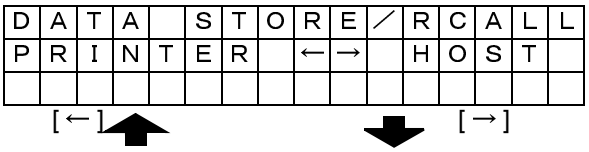
PROCESS ON THE SCREEN FOR TRANSFER OF TABLE DATA

6 + Power “ON”



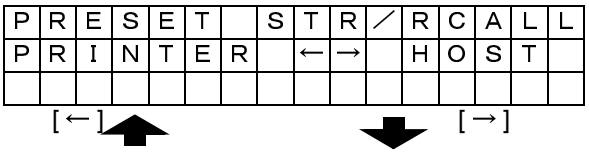
1

Press [ENTR], so that it goes to the screen for the selection of copying print parameter.
Press [→], so that it goes to the process No. 2.



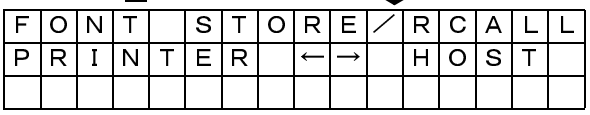
2

Press [ENTR], so that it goes to the screen for the selection of transferring print parameter.
Press [←], so that it goes to the process No. 1.
Press [→], so that it goes to the process No. 3.



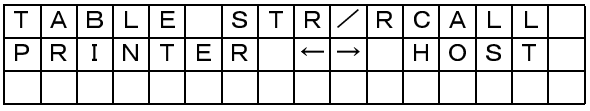
3

Press [ENTR], so that it goes to the screen for the selection of transfering preset.
Press [←], so that it returns to the process No. 2.
Press [→], so that it goes to the process No. 4.



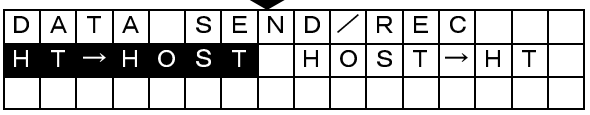
4

Press [ENTR], so that it goes to the screen for the selection of transfering font.
Press [←], so that it returns to the process No. 3.



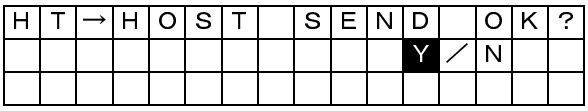
5

Press [ENTR], so that it goes to the screen for the selection of transfering table data.
Press [←], so that it returns to the process No. 4.

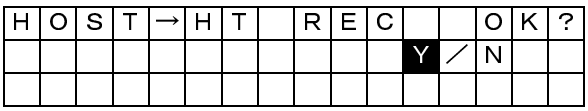


6

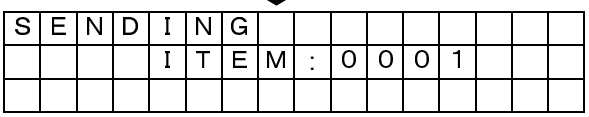
For the transfering direction, select [←] and [→], and press [ENTR] to go to the screen for the confirmation of receiving-and-sending.



Or:

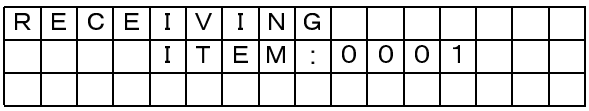


Press [ENTR]:
“Y” is to start receiving and sending.
“N” is to return to the process No. 5.



When sending one item is complete, the number o items will be added.
After sending, it returns to the process No. 5.

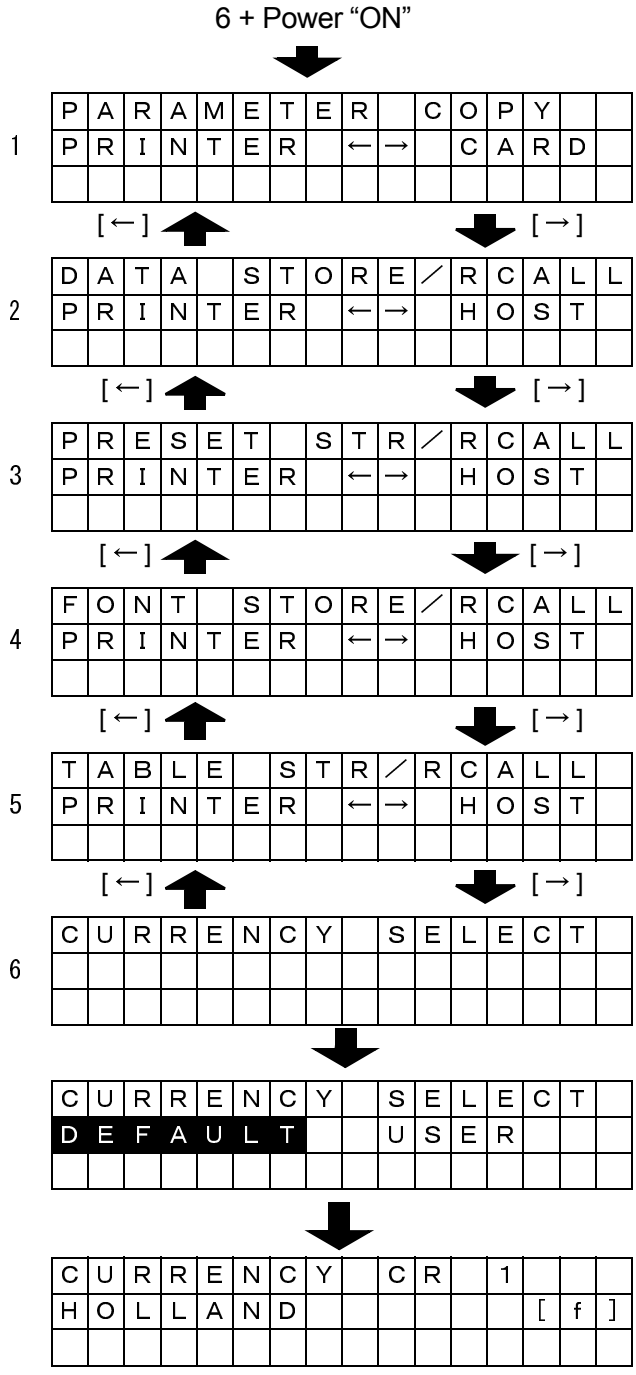
Or:



When receiving one item is complete, the number c items will be added.
After receiving, it returns to the process No. 5.

Table data that are transferred from a host computer will be registered in a printer. The data registered in the printer can be transferred to the host.
Note: When table data is transferred, on-line cable must be connected to the host before turning the power “ON”.

PROCESS ON THE SCREEN FOR CURRENCY MARK SETTING



Press [ENTR], so that it goes to the screen for the selection of copying print parameter.
Press [→], so that it goes to the process No. 2.

Press [ENTR], so that it goes to the screen for the selection of transferring print parameter.
Press [←], so that it returns to the process No. 1.
Press [→], so that it goes to the process No. 3.

Press [ENTR], so that it goes to the screen for the selection of transfering preset.
Press [←], so that it returns to the process No. 2.
Press [→], so that it goes to the process No. 4.

Press [ENTR], so that it goes to the screen for the selection of transfering font.
Press [←], so that it returns to the process No. 3.
Press [→], so that it goes to the process No. 5.

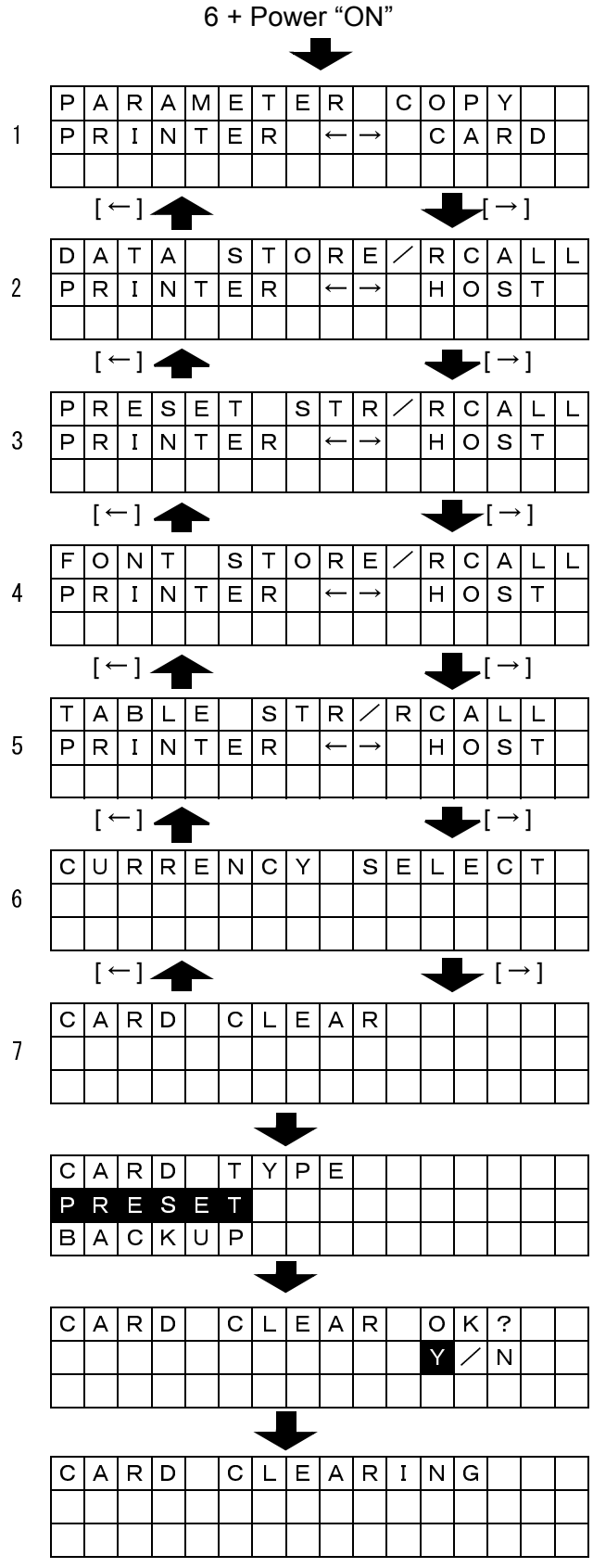
Press [ENTR], so that it goes to the screen for the selection of table data.
Press [←], so that it returns to the process No.4.
Press [→], so that it goes to the process No. 6.

Press [ENTR], so that it goes to the screen for the selection of currency mark.
Press [←], so that it returns to the process No. 5.

Select DEFAULT with [←] and [→] or choose USER, and press [ENTR]: Where DEFAULT is selected, Pound mark appears, from which it goes to the screen for the card clear. While USER is selected, it goes to the process No. 6.

Move with [←] and [→] to select currency mark, and press [ENTR]. This permits to set the currency and move to the screen for the card clear.

PROCESS ON THE SCREEN FOR CARD CLEAR



Press [ENTR], so that it goes to the screen for the selection of copying print parameter.
Press [→], so that it goes to the process No. 2.

Press [ENTR], so that it goes to the screen for the selection of transferring print parameter.
Press [←], so that it returns to the process No. 1.
Press [→], so that it goes to the process No. 3.

Press [ENTR], so that it goes to the screen for the selection of transfering preset.
Press [←], so that it returns to the process No. 2.
Press [→], so that it goes to the process No. 4.

Press [ENTR], so that it goes to the screen for the selection of transfering font.
Press [←], so that it returns to the process No. 3.
Press [→], so that it goes to the process No. 5.

Press [ENTR], so that it goes to the screen for the selection of transfering table data.
Press [←], so that it returns to the process No. 4.
Press [→], so that it goes to the process No. 6.

Press [ENTR], so that it goes to the screen for the selection of currency mark.
Press [←], so that it returns to the process No. 5.
Press [→], so that it goes to the process No. 7.

Press [ENTR], so that it goes to the screen for the selection of the card clear type.
Press [←], so that it returns to the process No. 6.

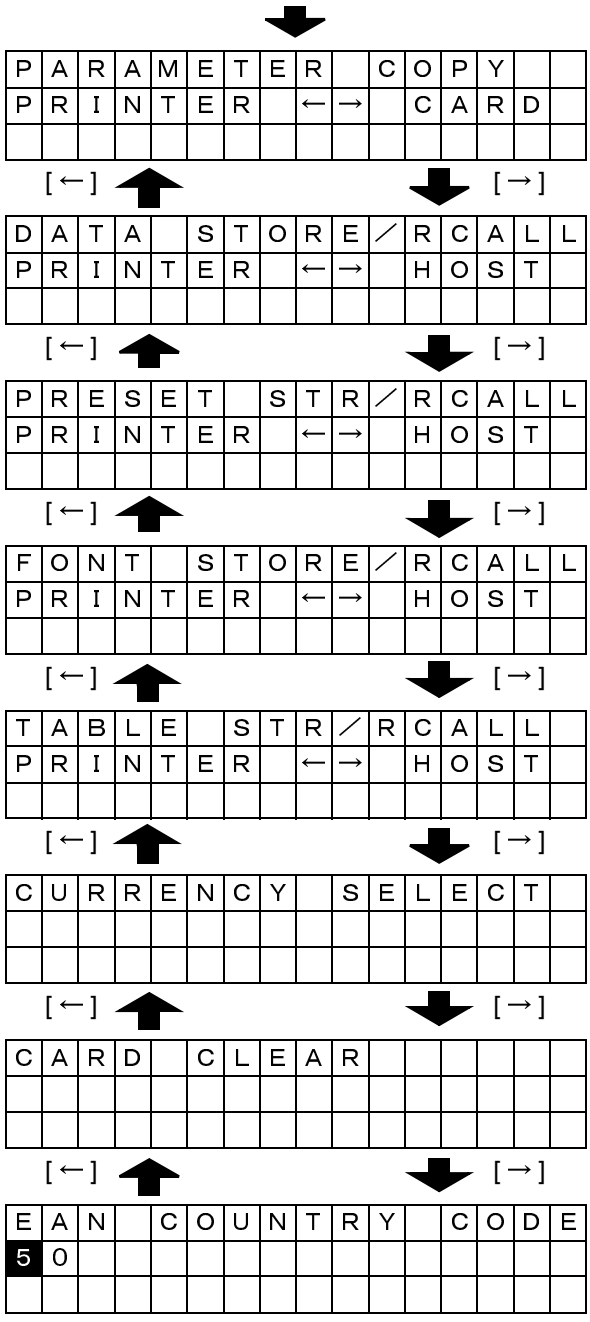
Select the type of card clear with [↑] and[↓]. Press [ENTR], so that it goes to the screen for the confirmation of card clear.

The execution for card clear can be selected with [←] and [→]: Where “Y” is selceted and [ENTR] is pressed, it will implement the card clear.
Where “N” is selected and [ENTR] is pressed, it returns to the process No. 7.

When completing card clear, it will return to the process No. 7.

PROCESS ON THE SCREEN FOR EAN COUNTRY CODE SETTING

6 + Power “ON”



1 Press [ENTR], so that it goes to the screen for the selection of copying print parameter.
Press [→], so that it goes to the process No. 2.

2 Press [ENTR], so that it goes to the screen for the selection of transferring print parameter.
Press [←], so that it returns to the process No. 1.
Press [→], so that it goes to the process No. 3.

3 Press [ENTR], so that it goes to the screen for the selection of transfering preset.
Press [←], so that it returns to the process No. 2.
Press [→], so that it goes to the process No. 4.

4 Press [ENTR], so that it goes to the screen for the selection of transfering font.
Press [←], so that it returns to the process No. 3.
Press [→], so that it goes to the process No. 5.

5 Press [ENTR], so that it goes to the screen for the selection of transfering table data.
Press [←], so that it returns to the process No. 4.
Press [→], so that it goes to the process No. 6.

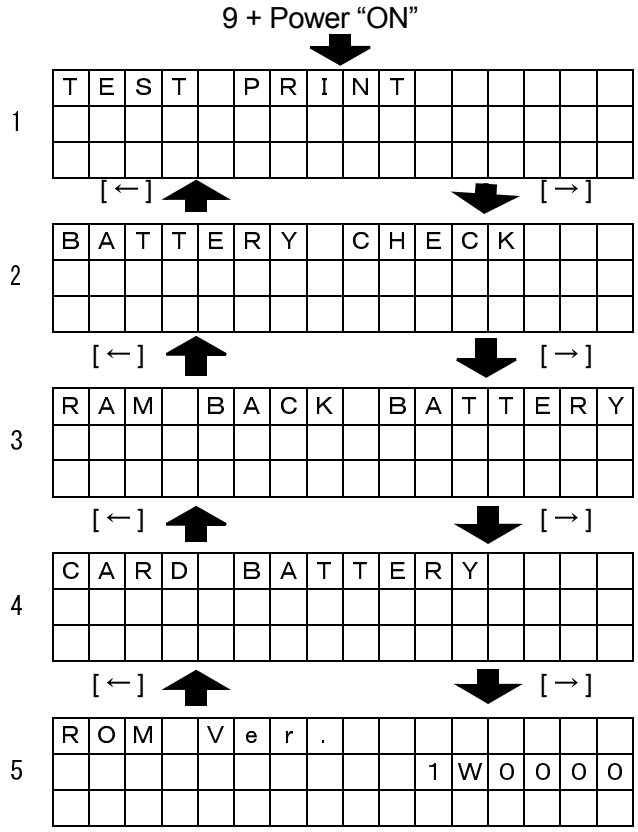
6 Press [ENTR], so that it goes to the screen for the selection of currency mark.
Press [←], so that it returns to the process No. 5.
Press [→], so that it goes to the process No. 7.

7 Press [ENTR], so that it goes to the screen for the selection of the card clear type.
Press [←], so that it returns to the process No. 6.
Press [→], so that it goes to the process No. 8.

8 [0] to [9] can be set in 2 digits, so that it permits the entry ranging from 00 to 99.
Press [←] , so that it returns to the process No. 7.

Note: When EAN COUNTRY CODE is entered, or when either AC is pressed without no numeric entry or [←] or [→] is used after entering value in 1 digit (or less than 2 digits), DEFAULT will return to 50.

PROCESS ON THE SCREEN FOR SERVICE MAINTENANCE MODE



Press [ENTR], so that it starts test print.
Press [→], so that it goes to the process No. 2.

Press [ENTR], so that it displays voltage in battery.
Press [←], so that it returns to the process No. 1.
Press [→], so that it goes to the process No. 3.

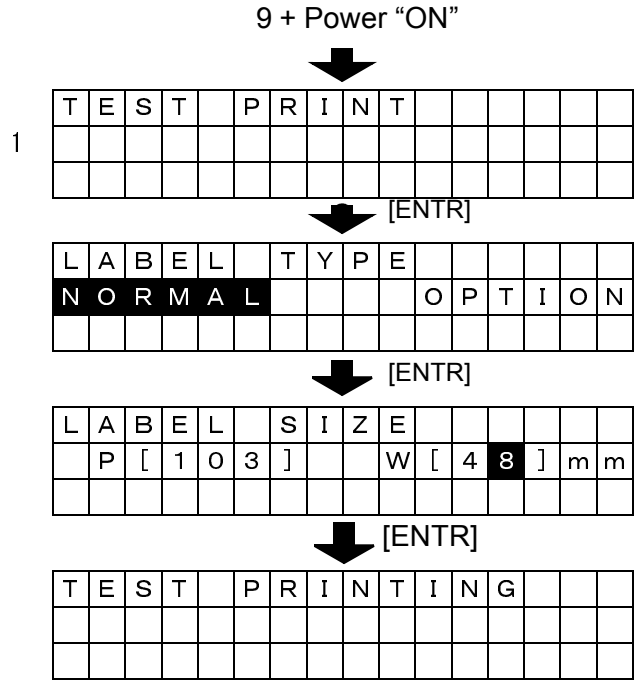
Press [ENTR], so that battery level (or remaining fuel) can be indicated for RAM’s back-up.
Press [←], so that it returns to the process No. 2.
Press [→], so that it goes to the process No. 4.

Press [ENTR], so that battery level (or remaining fuel) can be indicated for card’s back-up.
Press [←], so that it returns to the process No. 3.
Press [→], so that it goes to the process No. 5.

A ROM version can be displayed:
Note that [ENTR] is not available.
Press [←], so that it returns to the process No. 4.

Press [ENTR], so that it can go to each screen for processing.
For Service Maintenance Mode, [PGUP] is invalid, whereas [FMT] is valid.

PROCESS ON THE SCREEN FOR TEST PRINT



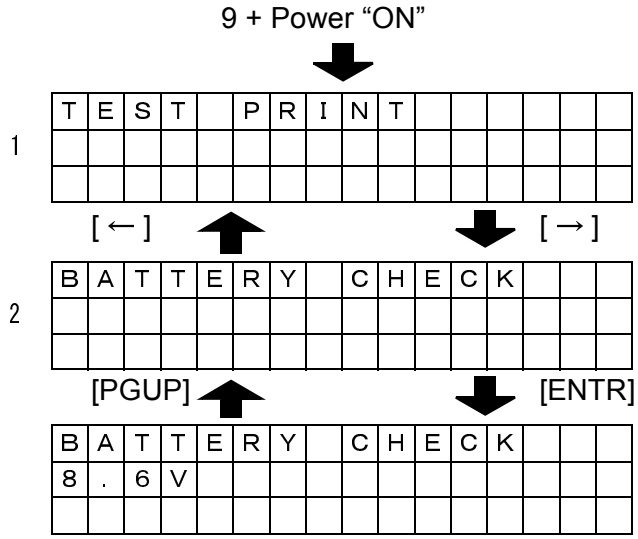
Press [ENTR], so that it goes to the screen for the selection of the label type in the test print.

Select label type with [←] and [→] and press [ENTR],so that it goes to the screen for label size.

Label size can be entered with numeric keypad:
Press [ENTR], so that it starts printing.

Test print will be terminated when printing one sheet of paper is complete: Press [S/S], so that test print can be executed as is ordered.
Ensure that whether label has been properly set prior to test print.

PROCESS ON THE SCREEN FOR VOLTAGE INDICATION OF BATTERY



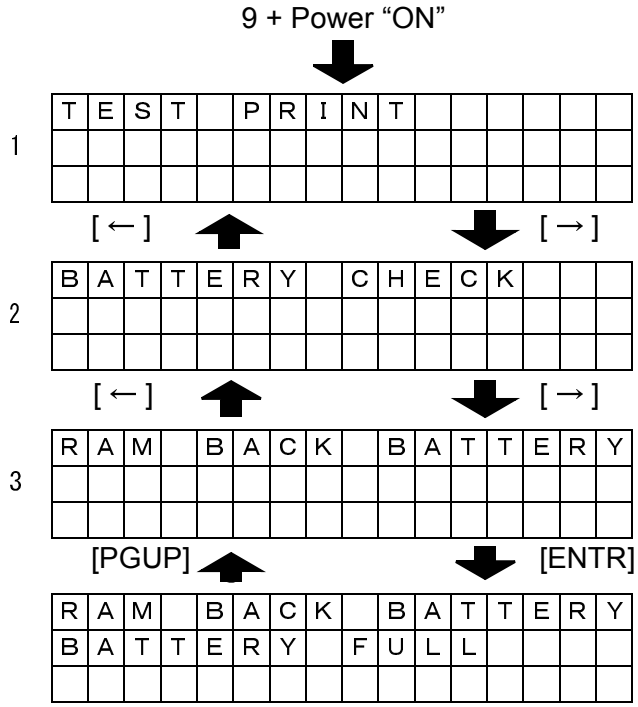
Press [ENTR], so that it starts test print.
Press [→], so that it goes to the process No. 2.

Press [ENTR], so that it displays voltage in battery.
Press [←], so that it returns to the process No. 1.

Press [PGUP], so that it returns to the screen for the selection of voltage indication in battery.

Note: For Service Maintenance Mode, FULL/EMPTY can not be made available for the voltage indication of battery. The battery voltage can only be displayed. Whether the battery is FULL or EMPTY will become available when power is applied.

PROCESS ON THE SCREEN FOR VOLTAGE INDICATION OF RAM BACK-UP MEMORY



Press [ENTR], so that it starts test print.
Press [→], so that it goes to the process No. 2.

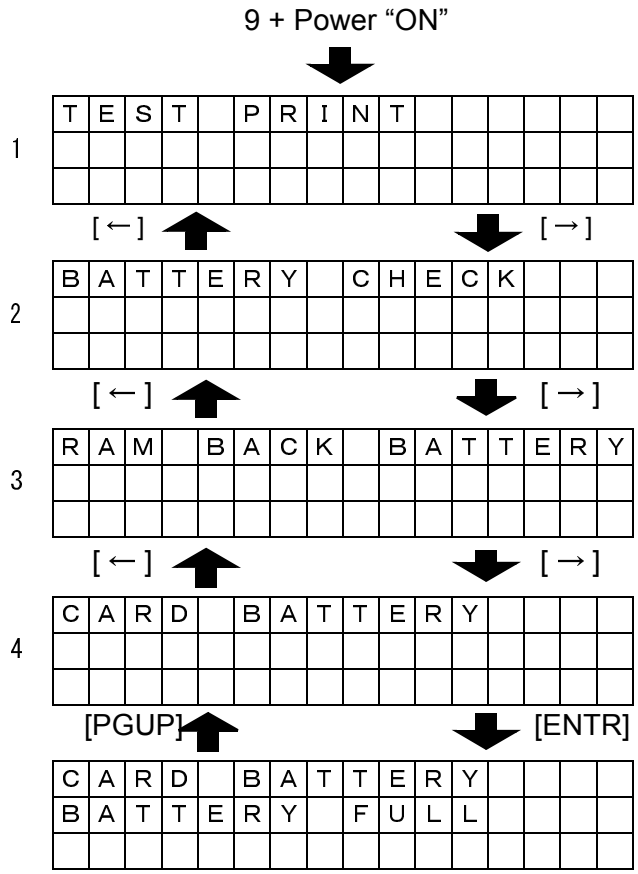
Press [ENTR], so that it displays voltage in battery.
Press [←], so that it returns to the process No. 1.
Press [→], so that it goes to the process No. 3.

Press [ENTR], so that battery level (or remaining fuel) can be indicated for RAM’s back-up.
Press [←], so that it returns to the process No. 2.

Press [PGUP], so that it returns to the screen for the selection of battery level indication for RAM’s back-up.

Note: For Service Maintenance Mode, FULL/EMPTY can be made available for the voltage indication of RAM’s back-up memory. The voltage can be not displayed. Whether the voltage is FULL or EMPTY will become available for the back-up memory when power is applied.

PROCESS ON THE SCREEN FOR VOLTAGE INDICATION OF CARD BACKUP MEMORY



Press [ENTR], so that it starts test print.
Press [→], so that it goes to the process No. 2.

Press [ENTR], so that it displays voltage in battery.
Press [←], so that it returns to the process No. 1.
Press [→] , so that it goes to the process No. 3.

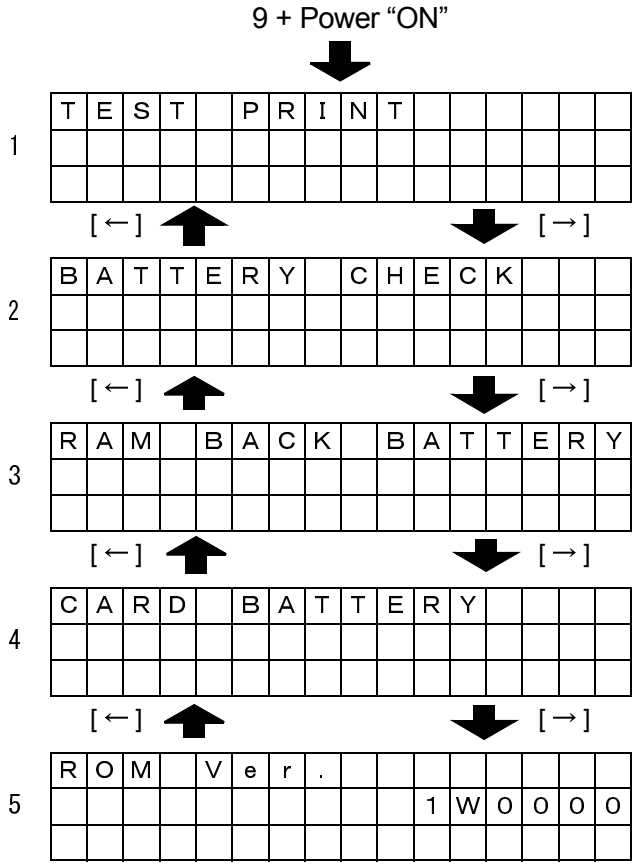
Press [ENTR], so that battery level (or remaining fuel) can be indicated for RAM’s back-up.
Press [←], so that it returns to the process No. 2.
Press [→], so that it goes to the process No. 4.

Press [ENTR], so that battery level (or remaining fuel) can be indicated for card’s back-up.
Press [←], so that it returns to the process No. 3.

Press [PGUP], so that it returns to the screen for the selection of battery level indication for cards back-up.

Note: Where card is not connected, there can not be seen any descriptions in the second line. For Service Maintenance Mode, FULL/EMPTY can be made available for the voltage indication of card back-up memory. The voltage can not be displayed. Whether the voltage is FULL or EMPTY will become available for the back-up memory when power is applied.

PROCESS ON THE SCREEN FOR INDICATION OF ROM VERSION



Press [ENTR], so that it starts test print.
Press [→], so that it goes to the process No. 2.

Press [ENTR], so that it displays voltage in battery.
Press [←], so that it returns to the process No. 1.
Press [→], so that it goes to the process No. 3.

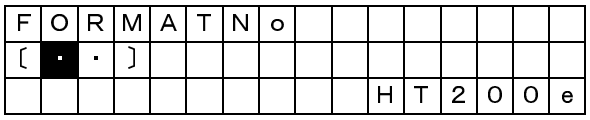
Press [ENTR], so that battery level (or remaining fuel) can be indicated for RAM's back-up.
Press [←], so that it returns to the process No. 2.
Press [→], so that it goes to the process No. 4.

Press [ENTR], so that battery level (or remaining fuel) can be indicated for card's back-up.
Press [←], so that it returns to the process No. 3.
Press [→], so that it goes to the process No. 5.

ROM version can be displayed:
[ENTR] is invalid.
Press [←], so that it returns to the process No. 4.

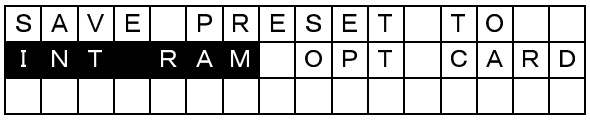
PROCESS ON THE SCREEN FOR INITIAL SETTING

1



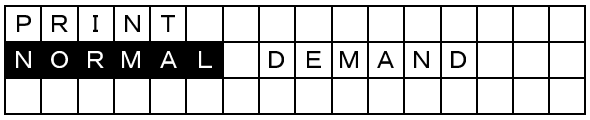
Enter “00”, and press [ENTR].

2



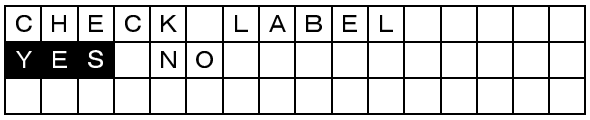
Destination (Internal memory or card) to preset can be selected:
Use [←] or [→], and press [ENTR].

3



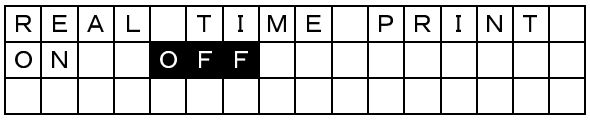
Print type can be chosen:
Use [←] or [→], and press [ENTR]. Where NORMAL is selected, it will print in continuous mode.
Where DEMAND is selected, it will be in dispense mode. Note that available size of label ranges from

4



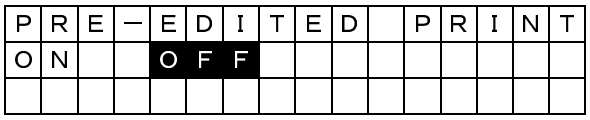
With or without check label can be selected:
Use [←] or [→], and press [ENTR].
IMPORTANT: This is the option for NORMAL in the process 3.

5



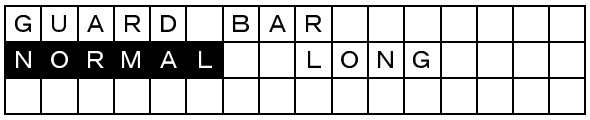
Print in real time can be selected:
Use [←] or [→], and press [ENTR].
IMPORTANT: This is the option for DEMAND in the process 3.

6



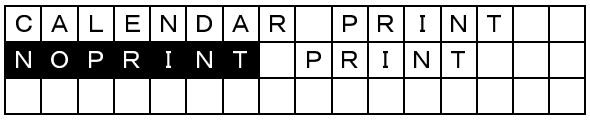
Print on a case-by-case basis can be selected:
Use [←] or [→], and press [ENTR].
IMPORTANT: This is the option for OFF in the

7



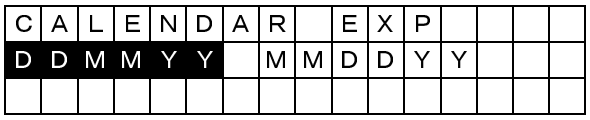
Guard Bar mode can be selected:
Use [←] or [→], and press [ENTR].
Format 1 to 9, 14, 15, 20, 22, 24, and 28 can be

8

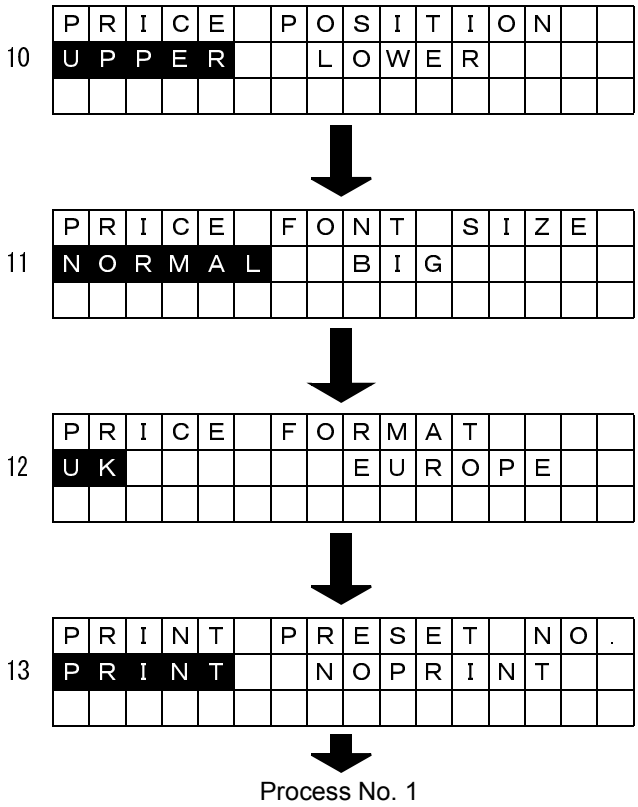


Print of date for fixed format can be selected:
Use [←] or [→], and press [ENTR].
Format 1 to 9 can be made available.

9



Presentation for the date in print can be selected:
Select DDMMYY or MMDDYY.
IMPORTANT: This is the option for PRINT in the process 8.



Print position of price in the fixed format can be selected:
Use [←] or [→], and press [ENTR].
Format 1 to 9, 11, 12, 14, and 15 can be made available.

Size of price in the fixed format can be selected:
Use [←] or [→], and press [ENTR].
Format 1 to 10 and 13 can be made available.
Note: Where date or preset is printed, letters can not be enlarged.

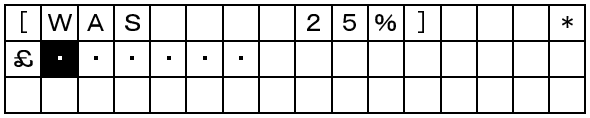
The procedure to present comma and period marks (when Flag 6 is selected for the price field) can be selected: UK: £1,234.50 EU: F1.234,50Use [←] or [→], and press [ENTR].

Print in preset No. can be selected:
Use [←] or [→], and press [ENTR].
Note that print can not be made in the free format.

OTHER SETTING

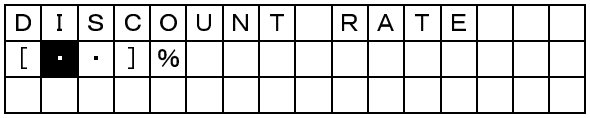
THE SCREEN FOR DISCOUNT RATE SETTING

1



On the WAS entry screen for the markdown format (**16, 17, 18, 19, 25**), press [FNC2], so that the discount rate being set will appear on the upper screen.

2



Key new discount rate, and press [ENTR] so that it returns to the process No. 1. Where [AC] is pressed, the data entered will be cleared.

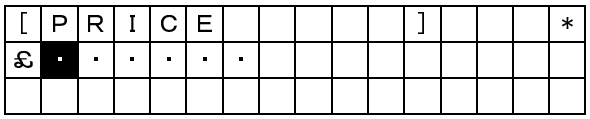
Note 1) Discount rate is a prerequisite, so that 0% can not be allowed.

Note 2) Where asterisk mark or "*" can be seen in the upper right on the screen, entry by scanner can be made possible.

Note 3) Fractions should be omitted.

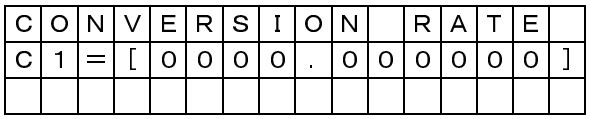
SCREEN FOR EURO CURRENCY CONVERSION RATE SETTING

1



On the PRICE entry screen for the dual pricing format (**20, 21, 28, 29**), press [FNC2].

2



Conversion rate (a prerequisite) MUST be entered: Where [ENTR] is pressed, it can be back to the process No. 1. When [AC] is pressed, the date entered will be cleared. Note: Where no rate is set, the process No. 2 will automatically be displayed before the No. 1.

For the entry of conversion rate, enter within 6 digits (Max.) without decimal points. In addition, ₢ should be 0.1 or more for this entry.

For setting conversion, the rate determined should be entered

e.g.) 1.95583 (Germany)

1234. 567890 (This entry is not VALID.)

Note 1: After four places of decimal will not be printed for the result of calculation. (Three places of decimal will be rounded off.)

Note 2: For the calculation of the currency mark becoming ₢ , where the result of calculation is rounded off, and the value before calculation can not be calculated back precisely with the method of the ₢ becoming the currency mark.

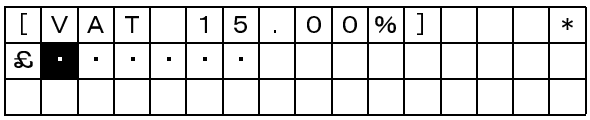
IMPORTANT 1) Discount rate is a prerequisite, so that 0% can not be allowed.

IMPORTANT 2) Where asterisk mark or "*" can be seen in the upper right on the screen, entry by scanner can be made possible.

Complimentary note: Dual pricing means that the currency for each country and Euro will be printed in double price.

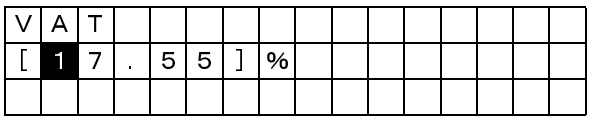
SCREEN FOR CONSUMPTION TAX RATE SETTING

1



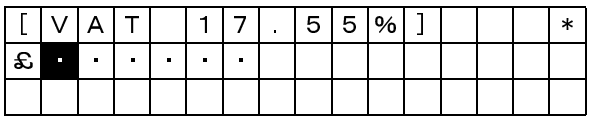
Press [FNC2], so that it goes to the screen for the consumption tax rate. **(Format 23.24)**

2



Where the tax rate is changed, re-enter 4 digits ranging from 0 to 9. Note that entry is a prerequisite. Press [ENTR], so that it goes back to the entry screen for PRICE.

3



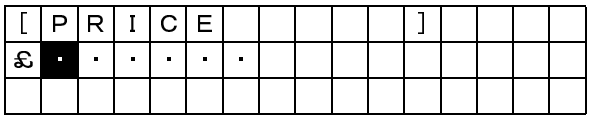
Press [AC], so that it clears the date entered.

Note: Where no rate is set, the process No. 2 will automatically be displayed before the No. 1.

Note 1) Consumption tax rate is a prerequisite, so that 0% can not be allowed.
Note 2) Where asterisk mark or "*" can be seen in the upper right on the screen, entry by scanner can be made possible.
Note 3) Fractions should be omitted.

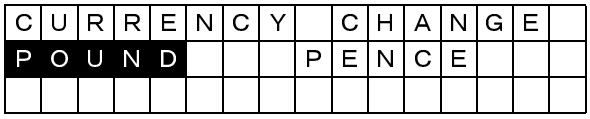
SWITCHING TO ENGLISH CURRENCY

1



On the PRICE entry screen in the default option 1 (See below.) for currency mark, press [FNC1].
(To use a price data)

2



Select pound and pence 2 (See below.) with [←] and [→].
Press [ENTR], so that it goes back to the process No. 1.

1. Default option: As referred to [5-6] on the Process on the Screen for Currency Mark Setting, where default option is selected, the mark will be represented in English currency.
2. Pound and pence: If, in the process No. 1, [SHFT] is pressed, it will not be changed to the presentation of pence on the screen.

Currency Mark	Print style	How to change:
Pound	£1.50	Select default currency, so that it will be changed to pound.
Pence	150ð	Select default currency, so that it will be changed to pence.

Where Pound is specified, decimal point will be put in the space between 2 and 3 digits from the last position in the price entered.
If the numbers entered are less than 3 digits, "0." will be added.

DISPLAY ON THE CONTENT OF PRICE INSERTION

1

[	P	R	I	C	E					]				
£	▪	▪	▪	▪	▪									

2

[	W	A	S							]				
£	▪	▪	▪	▪	▪									

Price field in the free format

3

[										]				
£	▪	▪	▪	▪	▪									

On these screens, press [SHFT], so that it changes to the display for the contents automatically inserted.

Press [SHFT] or [ENTR], so that it returns to the previous screen.

Note: Where, in the default condition, currency is changed to Pence, the automatic insertion using [SHFT] key remains displayed as Pound. However if it is changed to Pence, print only is switched to Pence.

SECTION 3: FIXED MODE

INTRODUCTION

This section is to assist you in using about “Fixed Mode”. The following information is provided in this section

INTRODUCTION	3-1
FIXED FORMAT	3-2
PLU BARCODES	3-2
NON-PLU BARCODES	3-2
PRICE REDUCTIONS	3-4
SIMPLE DATA AND PRICE	3-5
VAT CALCULATION	3-5
UNIT PRICING	3-6
EURO PRINCING	3-6
SHELF EDGE LABEL	3-7

FIXED FORMATS

Your printer comes with 29 fixed formats (label Designs)

PLU BARCODES

Format 01 This is an EAN 8 barcode with price and three digit human code	**Format 02** This is an EAN 8 barcode. The flag 50 is fixed with price and three digit human code	**Format 03** This is an EAN 13 barcode, with price and three digit human code	**Format 04** This is an EAN13 barcode. The flag 50 is fixed, with price and three digit human code

NON PLU BARCODES

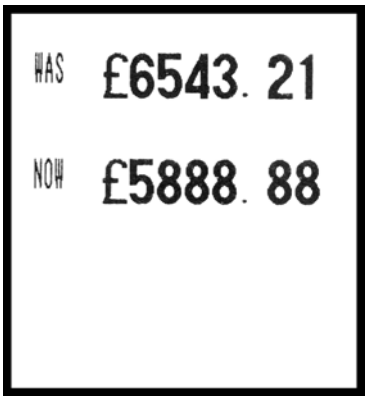
Format 05 This is an EAN 8 barcode. It needs a Non PLU flag; the human code and the price are included in the Barcode.	**Format 06** This is an EAN13 barcode. It needs a Non PLU flag; the 5-digit item code and 3-digit price are included in the Barcode. There is also a price check digit.	**Format 07** This is an EAN13 barcode. It needs a Non PLU flag; the 5-digit item code and 5-digit price are included in the Barcode.	**Format 08** This is an EAN13 barcode. It needs a Non PLU flag. The 6-digit item code and 4-digit price are included in the Barcode.

Format 09 This is an EAN13 barcode. It needs a Non PLU flag. The 4-digit item code and 6-digit price are included in the Barcode.	**Format 11** This is an EAN13 barcode. It needs a Non PLU flag. The 5-digit item code and 5-digit price are included in the Barcode. There is no human readable.	**Format 12** This is an EAN13 barcode. It needs a Non PLU flag. The 4-digit item code and 6-digit price are included in the Barcode. There is no human readable.

Format 14 This is 2 EAN8 barcodes. Not normally PLU, price and 3 digit human code.	**Format 15** This is 2 EAN13 barcodes. Not normally PLU, price and 3 digit human code.

PRICE REDUCTIONS

HT200e will calculate discount for you on these formats to set the discount % see **Adjusting the Discount Rate** section of this manual



Format 16

Here you enter the WAS price. The printer calculates the discount.

Format 19

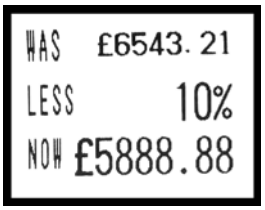
This is the same as format 16. The only difference is the layout.

Format 17

Here you input the EAN13 barcode and the WAS price. The Now price is calculated. The EAN13 and the “NOW” price are added into the new barcode (Code 128). There is also a prefix of 10 in this code, which acts as an application identifier.

Format 18

This is the same as format 17. The only difference is the layout.



Format 25

Here you enter the WAS price. The printer calculates the discount. In this case the discount amount is also displayed on the label.

SIMPLE DATA AND PRICE

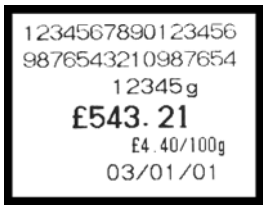
Format 10 Here we have a single line of 15 characters that can be a mixture of Alpha and Numeric along with a price.	**Format 13** Here we have two lines of 15 characters that can be a mixture of Alpha and Numeric along with a price.

VAT CALCULATION

Format 23 Here you enter the EX VAT amount and the printer does the rest. The VAT rate can be altered please refer to **Adjusting VAT Rate** section of this manual.	**Format 24** Here you enter the EX VAT amount and the printer calculates all the values. It also needs data to make or copy an EAN 13 barcode. The VAT rate can be altered please refer to **Adjusting VAT Rate** section of this manual.

UNIT PRICING

These are formats to conform to the legislation that requires retailers to show the equivalent price of goods to a standard capacity value. Retailers are advised to contact Trading Standards Department for full details of the legislation.



Format 26

At prompt “UNIT Voles” press FNC1 and select the legal unit. Arrow keys allow you to move about the screen. Press ENTR. “Pack size”: just enter the numeric value (not the symbol). Enter the pack price. You can then enter two lines of 16 digits Alphanumeric. Then you can enter days to add to today’s date.

Format 27

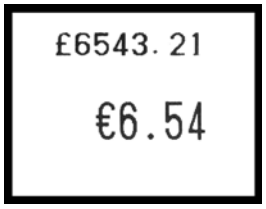
At prompt “Unit Voles” press FNC1 and select the legal unit. Arrow keys allow you to move about the screen. Press ENTR. “Pack size”: just enter the numeric value (not the symbol). Enter the pack price. You can then enter two lines of 16 digits Alphanumeric.

EURO PRICING

HT200e will calculate a conversion from your local currency into €uro. The conversion rate can be changed. Please refer to the **Adjusting Conversion Rate** section of this manual.

Format 20

Here you enter the local currency price and the printer calculates Euro value. It also needs data to make or copy an EAN 13 barcode. The conversion rate can be altered. Please refer to **Adjusting Conversion Rate** section of this manual.



Format 21

Here you enter the local currency price and the printer calculates Euro value. The conversion rate can be altered. Please refer to **Adjusting Conversion Rate** section of this manual.

Format 28

This is the same as format 20 but with the addition of two lines of text. It needs a larger label

Format 29

This is the same as format 21 but with the addition of two lines of text. The larger label allows for pre-print

SHELF EDGE LABEL

Format 22

This contains one line of 20 digits Alpha/numeric text plus two of 10 digits, a price and EAN 13 barcode.

In addition to this there are 15 formats that are available to be set up to your own design. Your supplier will be pleased to do this for you at a small charge.
These can include text, barcodes, prices & dates

SECTION 4 : FREE MODE

INTRODUCTION

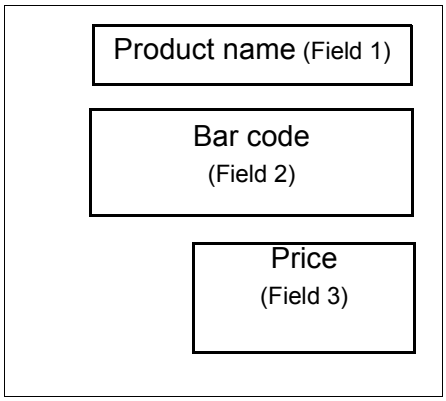
This section is to assist you in using about “Free Mode”. The following information is provided in this section.

INTRODUCTION 4-1
FIELD PARAMETER 4-2
- SETTING FOR NORMAL FIELD
- SETTING FOR TABLE FIELD
- SETTING FOR SEQUENTIAL NUMBER
- SETTING FOR PRICE
- SETTING FOR CALENDAR
- SETTING FOR BAR CODE
- FIELD DESIGNATION FOR NUMBER OF PRINTING
- ADDITIONAL INFORMATION FOR PARAMETER

FREE MODE 4-13
- PROCESS OF REGISTRATION MODE ON SCREEN
- DISPLAY ON THE SCREEN FOR NORMAL FIELD
- DISPLAY ON THE SCREEN FOR FORMAT/TABLE DATA FIELD
- DISPLAY ON THE SCREEN FOR NORMAL/SEQUENTIAL NUMBER FIELD
- DISPLAY ON THE SCREEN FOR PRICE FIELD
- DISPLAY ON THE SCREEN FOR CALENDAR FIELD
- DISPLAY ON THE SCREEN FOR BARCODE FIELD
- DISPLAY ON THE SCREEN FOR NUMBER OF PRINTING

FIELD PARAMETER

Format 1



The format consists of a collection of each print item called a field.

Field parameter allows a printer to set object, location, and identity.

Component of field parameter

Item	Field designation	Print setting	Designation for input check	Copy setting
No. of digits	1 to 2	3 to 15	16 to 21	22 to 46

Field designation

Field designation	
1st digit	2nd digit
1: Normal	0: Normal
	1: Table data
	2: Sequential number
2: Price	0: Normal
	1: POP
3: Calendar	0: Date
	1: Time
7: Bar code	0: Human readable information (HRI) is NOT available.
	1: Human readable information (HRI) is available.
0: Functional field	0: Quantity

Print setting (Font type)

Font type
3rd digit
0: X1 1: X2 2: X3 4: OCR-B
0: X1 1: X2 2: X3 5: Character for price
0: POP1 1: POP2 2: POP3
1: X2 2: X3
0: NW-7 1: CODE39 2: INT2of5 3: EAN13 4: EAN8 5: UPC-E 6: CODE128 (C Set) 7: CODE128 (B Set)

Note 1: Field Designation (Normal) shall not usually limit the entry for price and calendar and process data.

Note 2: Format 00 can be used to specify whether EAN guard bar is available or not.

For the following pages, parameter in the designation of each field will be described.

SETTING FOR NORMAL FIELD

Based on the field designation, the setting, in which “10: Normal” is specified, is explained.

Digit position (s)	Designated item	Description
1, 2	Field designation	10:Normal
3	Font selection	0: X1 (20 x 50 dots) 1: X2 (8 x 20 dots) 2: X3 (13 x 21 dots) 4: OCR - B (20 x 24 dots)
4, 5, 6	Vertical position	001 to 784 dot (s): Vertical print position 000: Entry only, where print is not required.
7, 8, 9	Horizontal position	001 to 384 dot (s): Horizontal print position
10	Rotation position (Note 1)	0: 0° 2: 180° 1: 90° 3: 270°
11	Character pitch (Note 2)	0 to 9 dot (s)
12, 13	Character count	01 to 32: Number of characters in the field
14	Vertical expansion	1 to 4: Magnification of vertical direction to character
15	Horizontal expansion	1 to 4: Magnification of horizontal direction to character
Input Check Digits		
16	Input check (Note 3)	0: No check 5: Numeric only 2: Must enter 6: Numeric in all digits 7: Numeric is accepted, but neither 0 nor un-entry is allowed.
17	Set of title	0: Not display as a title in printing preset 1: Initially display as a title in printing preset (For a format, one field set only.)
18	Reserved	0: Determined
19	0 insertion	0: No 0 insertion 1: 0 insertion in right-aligned when copy is required (i.e. 1 = 001)
20	Preset	0: No entry in printing preset (Not displayed) 1: Entry in printing preset (Displayed)
21	Color of font	0: Black 4: Black-and-white reversal 3: Red

Note 1: For the position of rotation, see 1. in Additional Information for Parameter.

Note 2: When horizontal direction is enlarged, space between characters will increase.

Based on the field designation, the setting for copy functions will be explained in the following.

10: Normal
11: Normal/Table data
12: Normal/Sequential number
20: Price/Normal
21: Price/POP
70: Bar code/HRI is available
71: Bar code/HRI is NOT available

A calendar field can not be copied.
For Normal/Table data, a copy can not be received.

Copy setting		
Digit position (s)	Designated item	Description
22	Copy action	0: No copy 1: Copy 2: Receive a copy Note: The information below is only available when the Copy action 1 is selected.
23, 24	Copy 1	01 to 32: First position to specify the range of copying characters
25, 26		01 to 32: Number (or digits) of characters to be copied
27, 28		01 to 29: Field number for characters to be sent
29, 30		01 to 32: Position that specified characters to start copying
31, 32	Copy 2	01 to 32: Fist position to specify the range of copying characters
33, 34		01 to 32: Number (or digits) of characters to be copied
35, 36		01 to 29: Field number for characters to be sent
37, 38		01 to 32: Position that specified characters to start copying
39, 40	Copy 3	01 to 32: Fist position to specify the range of copying characters
41, 42		01 to 32: Number (or digits) of characters to be copied
43, 44		01 to 29: Field number for characters to be sent
45, 46		01 to 32: Position that specified characters to start copying

FIELD SETTING FOR TABLE DATA

Based on the field destination, the setting, in which “11: Table Data” is specified, is described.

Digit Position(s)	Designated item	Description
1, 2	Field designation	11: Table Data
3	Font selection	0: X1 (20 x 50 dots) 1: X2 (8 x 20 dots) 2: X3 (13 x 21 dots) 4: OCR-B (20 x 24 dots)
4, 5, 6	Vertical position	001 to 784 dot (s): Vertical print position 000: Entry only, where print is not required.
7, 8, 9	Horizontal position	001 to 384 dot (s): Horizontal print position
10	Rotation position (Note 1)	0: 0° 2: 180° 1: 90° 3: 270°
11	Character pitch (Note 2)	0 to 9 dot (s)
12, 13	Character count	01 to 32: Number of characters in the field
14	Vertical expansion	1 to 4: Magnification of vertical direction to character
15	Horizontal expansion	1 to 4 :Magnification of horizontal direction to character
Input Check Digits		
16	Input check	0: No check 2: Must enter
17	Set of title	0: Not display as a title in printing preset 1: Initially display as a title in printing preset (For a format, one field set only.)
18	Set of table number	1: Table 1 data 3: Table 3 data 2: Table 2 data
19	0 insertion	0: No 0 insertion 1: 0 insertion in right-aligned when copy is required. (i.e. 1 = 001)
20	Preset	0: No entry in printing preset (Not displayed) 1: Entry in printing preset (Displayed)
21	Color of font	0: Black 4: Black-and-white reversal 3: Red

Note 1: For the position of rotation, see 1. in Additional Information for Parameter.

Note 2: When lateral direction is enlarged, space between characters will increase.

FIELD SETTING FOR SEQUENTIAL NUMBER

Based on the field designation, the setting, in which “12: Normal/Sequential Number” is specified, is described.

Digit position (s)	Designated item	Description
1, 2	Field designation	12: Normal/Sequential Number
3	Font selection	0: X1 (20 x 50 dots) 1: X2 (8 x 20 dots) 2: X3 (13 x 21 dots) 4: OCR-B(20 x 24 dots)
4, 5, 6	Vertical position	001 to 784 dot (s): Vertical print position 000: Entry only, where print is not required.
7, 8, 9	Horizontal position	001 to 384 dot (s): Horizontal print position
10	Rotation position (Note 1)	0: 0° 2: 180° 1: 90° 3: 270°
11	Character pitch (Note 2)	0 to 9 dot (s)
12, 13	Character count	01 to 08: Number of characters in the field
14	Vertical expansion	1 to 4: Magnification of vertical direction to character
15	Horizontal expansion	1 to 4: Magnification of horizontal direction to character
Input Check Digits		
16	Input check	5: Numeric only 6: Numeric in all digits 8: Numeric and uppercase in English only 9: Numeric and uppercase in English in all digits
17	Function for sequential number	0: Invalid 1 to 9: Valid for the table of sequential number
18	Reserved	0: Determined
19	0 insertion in numbering sequence	0: Without 0 insertion 1: With 0 insertion
20	Preset	0: No entry in printing preset (Not displayed) 1: Entry in printing preset (Displayed)
21	Reserved	0: Determined

Note 1: For the position of rotation, see 1. in Additional Information for Parameter.

Note 2: When horizontal direction is enlarged, space between characters will increase.

Note 3: Copy from the field of sequential number to the field is not allowed.

FIELD SETTING FOR PRICE

Based on the field designation, the setting, in which “20: Price (Standard)” and “21: Price (POP)” are signified is described.

Digit position (s)	Designated item	Description
1, 2	Field designation	20: Price (Standard) 21: Price (POP)
3	Font selection	Regular / POP 0: X1 (20×50 dots) / 0: POP 1 (28×48 dots) 1: X2 (8×20 dots) / 1: POP 2 (48×68 dots) 2: X3 (13×21 dots) / 2: POP 3 (26×56 dots) 5: Price font (16×24 dots)
4, 5, 6	Vertical position	001 to 784 dot (s): Vertical print position 000: Entry only, where print is not required.
7, 8, 9	Horizontal position	001 to 384 dot (s): Horizontal print position
10	Rotation position (Note 1)	0: 0 degree / 2: 180 degree 1: 90 degree / 3: 270 degree
11	Character pitch (Note 2)	0 to 9 dot (s)
12, 13	Character count	01 to 10: Number of characters in the field Note that currency mark, comma, or decimal point are not included.
14	Vertical expansion	1 to 4: Magnification of vertical direction to character Note that POP font ranges from 1 to 3.
15	Horizontal expansion	1 to 4: Magnification of horizontal direction to character Note that POP font ranges from 1 to 3.
Input Check Digits		
16	Input check	5: Numeric only / 6: Numeric in all digits 7: Numeric is accepted, but currency mark, 0, and un-entry are not allowed.
17	Input method	0: Enter in left-aligned 1: Enter in right-aligned
18	Insertion	0: None / 1: Currency mark only 2: Currency mark and decimal point 5: Currency mark and comma 6: Currency mark, comma, and decimal point 7: Comma and decimal point
19	0 insertion	0: No 0 insertion 1: 0 insertion in right-aligned (i.e. 1 = 001)
20	Preset for general / Euro currency mark	0: No entry, so that general currency mark is not shown. 1: Entry required, so that general currency mark is shown. 8: No entry, so that Euro currency mark is not shown. 9: Entry required, so that Euro currency mark is shown.
21	Reserved	0: Determined

Note 1: For the position of rotation, see 1. in Additional Information for Parameter.

Note 2: When horizontal direction is enlarged, space between characters will increase.

FIELD SETTING FOR CALENDAR

Based on the field designation, the setting, in which “30/31: Calendar” is specified, is described.

Digit position (s)	Designated item	Description
1, 2	Field designation	30: Calendar/Date 31: Calendar/Time
3	Font selection	1: X2 (8 x 20 dots) 2: X3 (13 x 21 dots)
4, 5, 6	Vertical position	001 to 784 dot (s): Vertical print position 000: Entry only, where print is not required.
7, 8, 9	Horizontal position	001 to 384: Horizontal print position
10	Rotation position (Note 1)	0: 0° 2: 180° 1: 90° 3: 270°
11	Character pitch (Note 2)	0 to 9 dot (s)
12, 13	Character count	01 to 10: Number of characters in the field
14	Vertical expansion	1 to 4: Magnification of vertical direction to character
15	Horizontal expansion	1 to 4: Magnification of horizontal direction to character
Input Check Digits		
16	Input check	6: Numeric in all digits 7: Numeric is accepted, but neither 0 nor un-entry is allowed.
17	Addition	0: No addition 1: Addition Note that date and time should be arranged separately in each field per format.
18	Selection for presentation	For Date filed; 1: mmddyy 3: ddmmyyyy 2: yymmdd 4: mmddyyyy 0: ddmmyy 5: yyyymmdd For time filed; 0: 5:30 23:05 (Addressed in 24-hour system) 1: AM 5:30 PM 11:05 (AM and PM are affixed.) 2: 5:30 AM 11:05 PM (AM and PM are suffixed.)
19	Separator (Note 4)	0: None 1:/ 2: - 3:.
20	Preset	0: No entry in printing preset (Not displayed) 1: Entry in printing preset (Displayed)
21	Reserved	0: Determined

Note 1: For the position of rotation, see 1. in Additional Information for Parameter.
Note 2: When horizontal direction is enlarged, space between characters will increase.
Note 3: Where the addition for time and date is specified for the identical format, carried-over time will be reflected to the date.
Note 4: Separator does not involve in time.

FIELD SETTING FOR BAR CODE

Based on the field designation, the setting, in which “70/71: Bar Code” is specified, is described.

Digit position (s)	Designated item	Description
1, 2	Field designation	70: Human readable information (HRI) is NOT available. 71: HRI is available.
3	Bar code type	0: NW-7 1: CODE 39 2: INT 2 o f5 3: AN13/UPC-A 4: EAN 8 5: UPC ─ E 6: CODE 128 (C set) 7: CODE 12 (B set)
4, 5, 6	Vertical position	001 to 784 dot (s): Vertical print position 000: Entry only, where print is not required.
7, 8, 9	Horizontal position	001 to 384 dot (s): Horizontal print position
10	Rotation position (Note 1)	0: 0° 2: 180° 1: 90° (Note 2) 3: 270° (Note 2)
11	Character pitch (Note 3)	0 to 9 dot (s) Note that if HRI is available, it means spacing between the characters in it.
12, 13	Character count	01 to 22: Number of digits in the bar code EAN 8: 08 EAN 13: 13 UPC-A : 12 UPC-E : 07 Note that Start/Stop is not included for NW-7/CODE 39.
14	Bar ratio	0 = Invalid (EAN, UPC-A, and UPC-E) 1 = 1:2 2 = 1:2.5 3 = 1:3
15	Bar expansion	2 to 4: (Ratio 1: 2.5 will be enlarged only to twofold and fourfold)
Input Check Digits		
16, 17, 18	Bar height	001 to 240 dot (s)
19	Check digit (Note 4)	0: No C/D 1: C/D creation (Computing) 2: C/D check (with input data) 3: Price C/D (Only for EAN 13)
20	Preset	0: No entry in printing preset (Not displayed) 1: Entry in printing preset (Displayed)
21	Reserved	0: Determined

Note 1: For the position of rotation, see 1. in Additional Information for Parameter.

Note 2: The rotation position of 90 and 270° is a hidden mode; the guidance will not be displayed.

Note 3: When horizontal direction is enlarged, space between characters will be increase.

Note 4: When CODE 128 is being set, specify “1”.

FIELD DESIGNATION FOR NUMBER OF PRINTING

Based on the field designation, the setting, in which “00: Number of Print” is specified, is described.

Digit position (s)	Designated item	Description
1, 2	Field designation	00: Field for Number of Printing
3	Fixed quantity (Case 1)	0: No fixed print quantity (It is regularly used) 1: Fixed print quantity
4 to 15	Reserved	All must be set to 0.
16	Count (Case 2)	The method of counting labels can be specified for a dispense mode: 0: It prints the number of labels entered. Other than 0: It can freely print because of no number is specified.
17 to 30	Reserved	All must be set to 0.

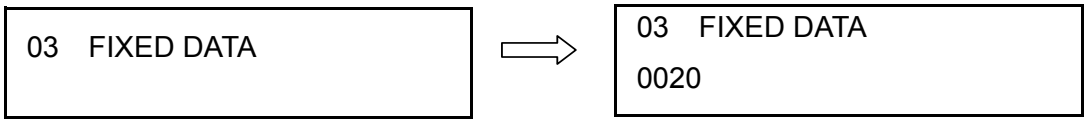
Important: “Field Designation = 00” must be specified, so that the field for the number of printing will be placed in the last field. That is--if the fields from 1 to 3 have been set, the field No. 4 will be arranged for the number of printing.

Case 1 When the fixed quantity “1” is selected:

Press ENTR to go to the Fixed Quantity display. Then enter all 4 digits in numbers.

Please note if the quantity is not properly specified, the function will not work appropriately.

See the sample below, where 20 labels are fixed. The number on the upper left shows the field No.



〔Additional notes〕

If a unique format, in which fixed data in all fields must be fixed in all digits, is used for the fixed quantity, one field without printing should be set aside as a place for return after printing.

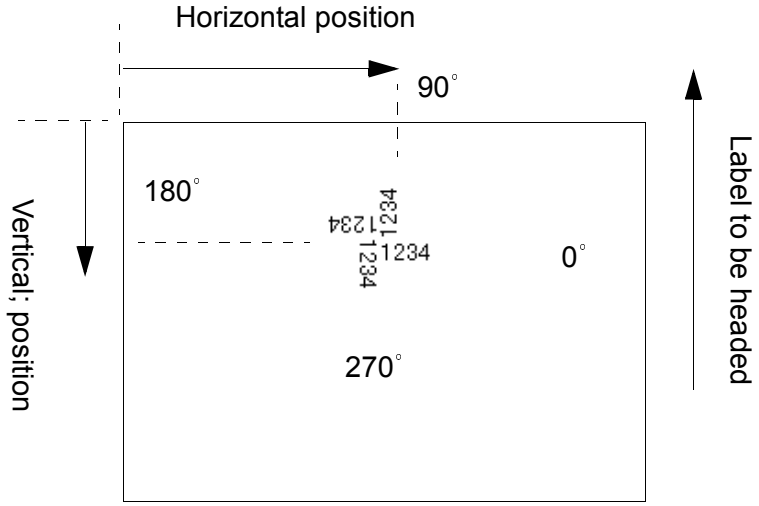
(The field without printing can be prepared if “000” is specified as the vertical print position.)

Case 2 When the fixed quantity “1” is selected:

The count designation “0” (or the number of label entered will be printed) is only available for setting.

ADDITIONAL INFORMATION FOR PARAMETER

1. Position of rotation



2. Print on the two colors and black-and-white reversal
   1) When the print in two colors and black-and-white reversal is performed with an optional battery, the battery consumes much more rapidly than the use in regular condition. To solve this problem, an auxiliary AC power supply is recommended for its use.
   2) If black color is pressed for a certain time to red-base label, the character will be printed in black.
   3) Do not print if the print rate exceeds 30 % or more. If it surpasses that percentage, the print quality can not be assured.
   4) In the service maintenance mode, test print will be colored in black.

3. A pattern of print in price marking

Price field	Currency mark	The result of print (“123456” are entered.)		The result of print for “7”	
On 18th digits	£/p	UK	EUROPE	UK	EUROPE
2	£	£1234.56	£1234,56	£0.07	£0,07
2	p	123456 p	123456 p	7p	7 p
5	£	£123,456	£123.456	£7	£7
5	p	123,456 p	123.456 p	7 p	7 p
6	£	£1,234.56	£1.234,56	£0.07	£0,07
6	p	123,456 p	123.456 p	7 p	7 p
7	£	1,234.56	1.234,56	0.07	0,07
7	p	123,456	123.456	7	7

4. Check digit calculating method

NW-7	: 7 Check
CODE 39	: Modulus 43
INT2 of 5	: Modulus 10
EAN	: Modulus 10
UPC-E	: Dedicated modulus 10
CODE 128	: Modulus 103

5. Digit designation for bar code
   For the use of UPC-E, set 7 digits.

6. Print pattern for the fields in date and time
   Date setting samples:

Date field	Selection = 0	DDMMYY
“150901”	“151201”	

Date field	Selection = 1	MMDDYY
“091501”	“121501”	

Date field	Selection = 2	YYMMDD
“010915”	“011215”	

Date field	Selection = 3	DDMMYYYY
“15092001”	“15122001”	

Date field	Selection = 4	MMDDYYYY
“09152001”	“12152001”	

Date field	Selection = 5	YYYYMMDD
“20010915”	“20011215”	

Time setting samples:

Time field	Selection = 0		
“ 5 : 30”	“23 : 05”	“11 : 00”	“ 0 : 05”

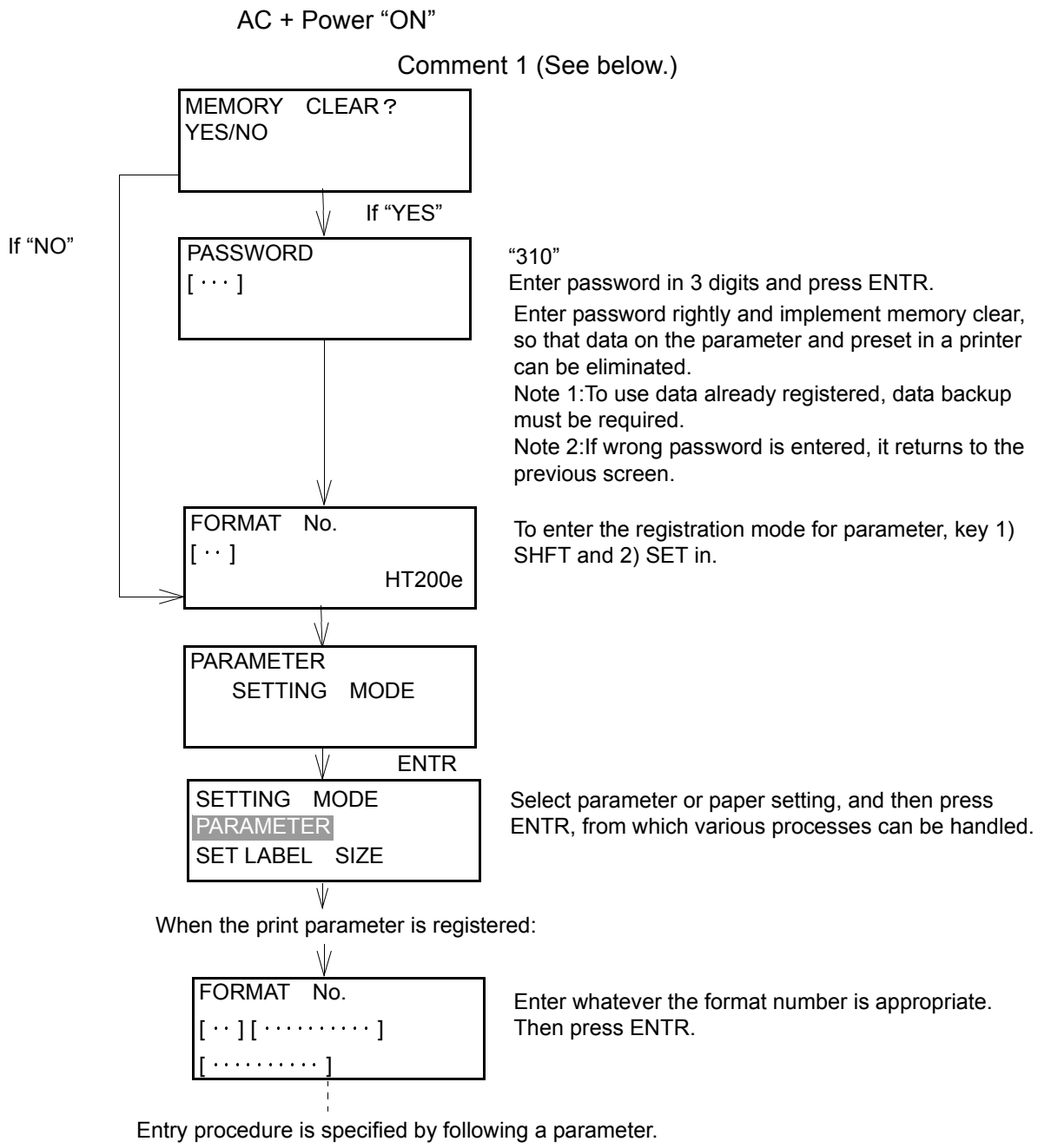
Time field	Selection = 1		
“AM 5 : 30”	“PM11 : 05”	“AM11 : 00”	“AM 0 : 05”

Time field	Selection = 2		
“ 5 : 30AM”	“11 : 05PM”	“11 : 00AM”	“ 0 : 05AM”

FREE MODE

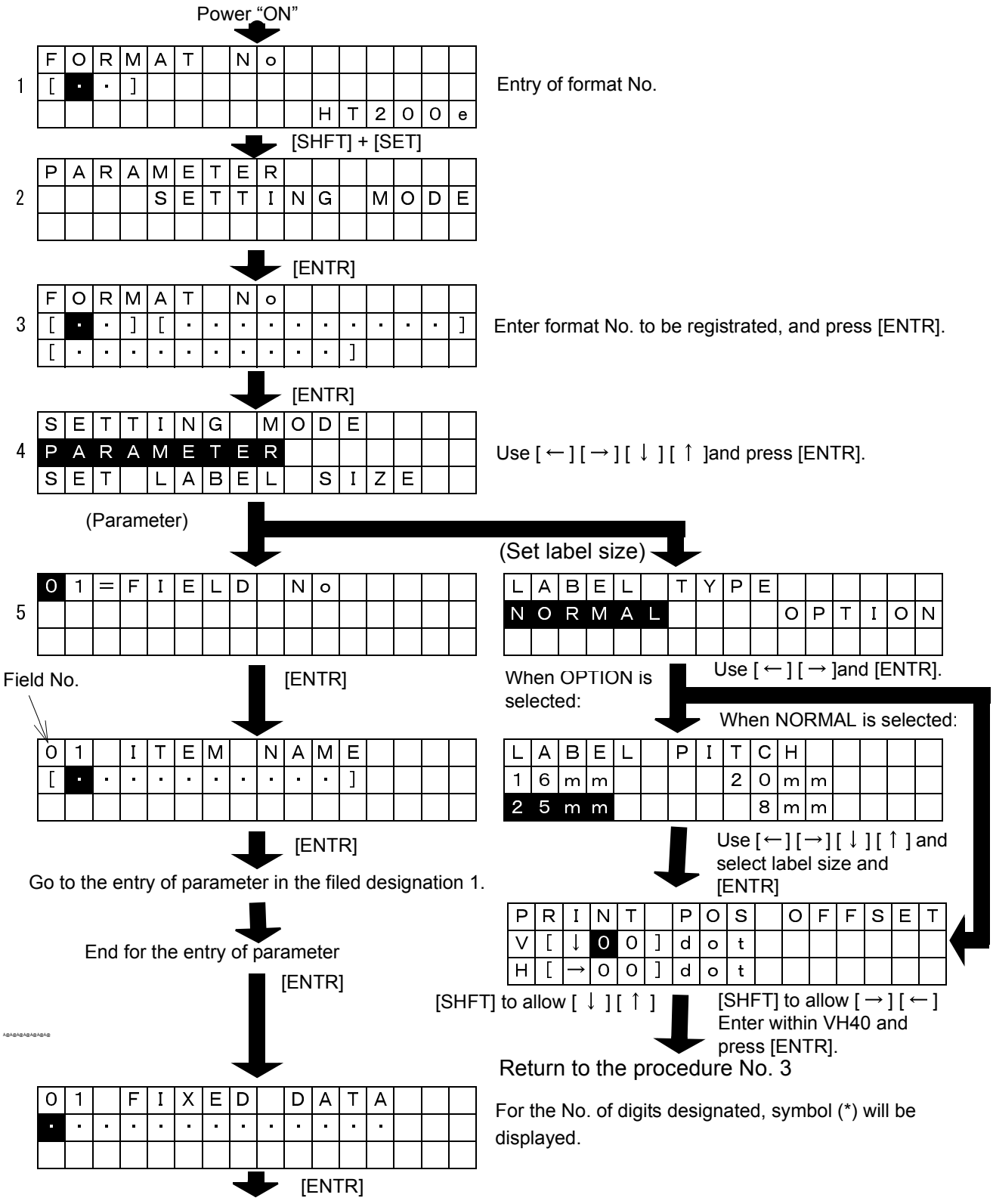
Free mode allows free set for print layout, character, and bar code so as to print them on the label. Setting the layout, the types of character and bar code, and the entry method is called “field parameter” and the registration mode can be used to preset them.

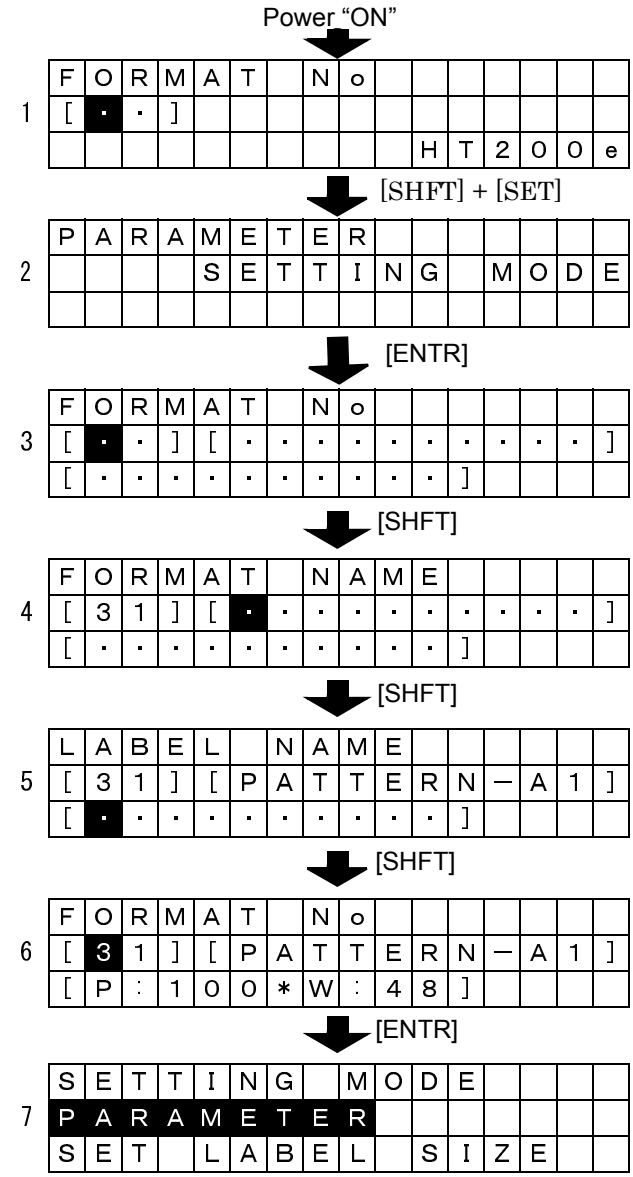
The function also includes issuance of sequential number and addition of date and time.



Comment 1 When power is “ON”, a screen for the entry of format number will be displayed.

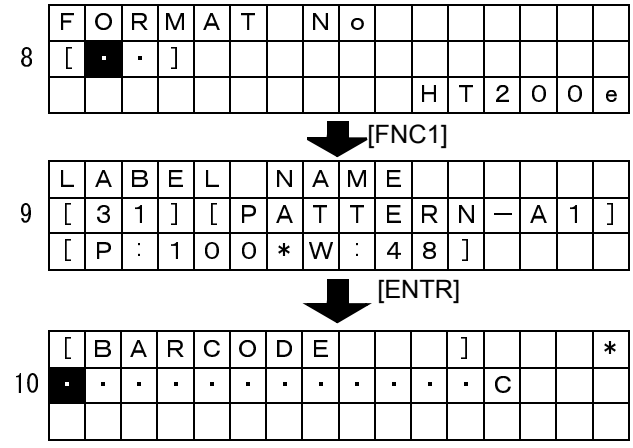
PROCESS OF REGISTRATION MODE ON SCREEN



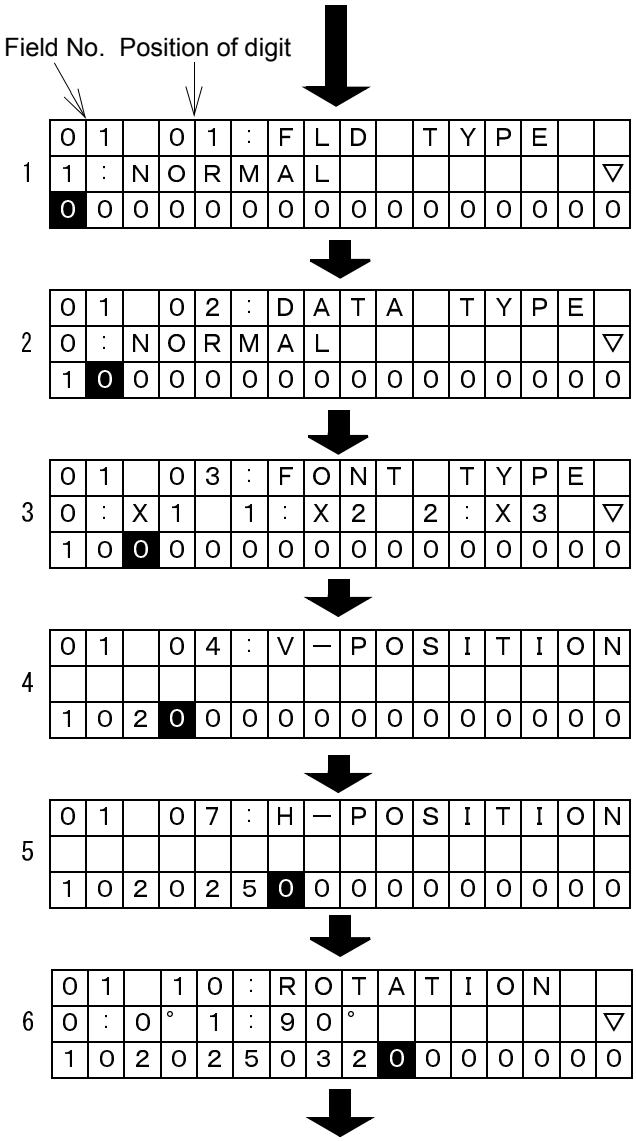


Note 1) In the processes of No. 4 and 5, press [ENTR] so that the procedure No. 7 can be reached.
Since the processes use a [SHFT] key to switch the entry items, lowercase can not be allowed.

Note 2) The names for the format and label will be registered right after parameter has been entered.
If it is terminated without the entry of parameter, the names registered shall be cleared off.



DISPLAY ON THE SCREEN FOR NORMAL FIELD



1 Enter “1” for the field type. Guidance will be displayed in the second line. A triangle mark that heads downward can be seen. While it is on, press [SHFT] to change the item of the guide and key the value to meet your need.

2 Enter “0” for the data type.

3 Value in one digit can be entered for the character type. Select the value from “0”, “1”, “2”, and “4”.

4 Value in 3 digits can be entered for the vertical position: Select the values from “001” to “784”.
Note: “000” is a field where only entry is required, so that no print is made

5 Value in 3 digits can be entered for the horizontal position: Select the values from “001” to “384”.

6 Value in one digit can be entered for the rotation: Select the value from “0”, “1”, “2”, and “3”.

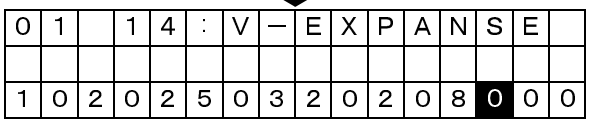
It will go to the entry for character pitch.

Note: Use [FMT] to return to the entry of the format number to be registered.
Press [ENTR] to determine the data selected, so that the entry of fixed data can be reached.
In determining the data selected, when some error is found in the digit over the parameter line, the cursor indicates you to the position.

7 Value in one digit can be entered for spacing between characters: Select the value from “0” to “9”.

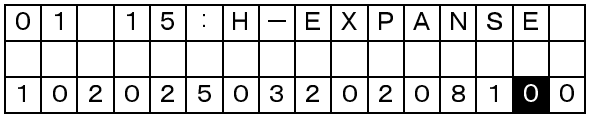
8 Value in 2 digits can be entered for the number of characters: Select the values from “01” to “32”.

9



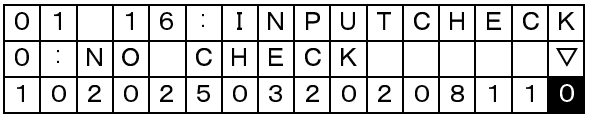
Value in one digit can be entered for the magnification of vertical expansion: Select the value from “1” to “4”.

10



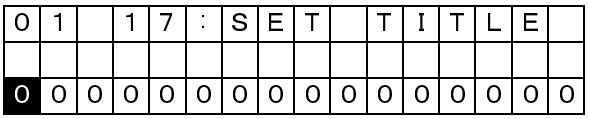
Value in one digit can be entered for the magnification of horizontal expansion: Select the value from “1" to”4”.

11



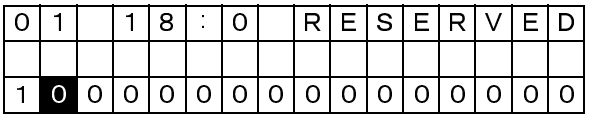
Value in one digit can be entered for the input check: Select the value from “0”, “2”, “5”, “6”, and “7”.

12



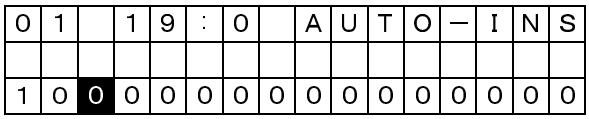
Title can be displayed:
(Note: It will be displayed in only one field per format.)

13



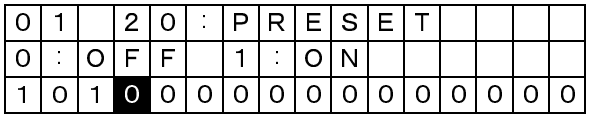
“0” is fixed.

14



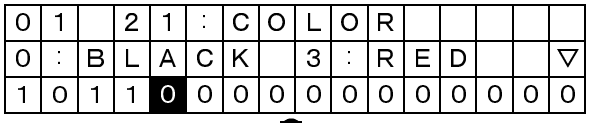
Value in one digit can be entered for with or without 0 insertion: Select “0” or “1”.

15



Value in one digit can be entered for preset: Select “0” or “1”.

16

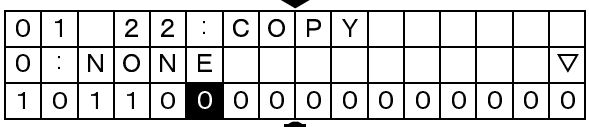


Value in one digit can be entered for print color. Select from “0”, “3”, and “4”.

It will go to the entry for copy.

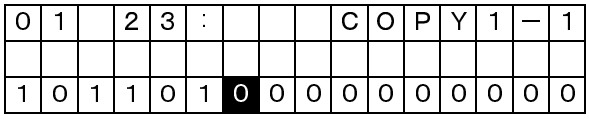
For entry of copy:

17

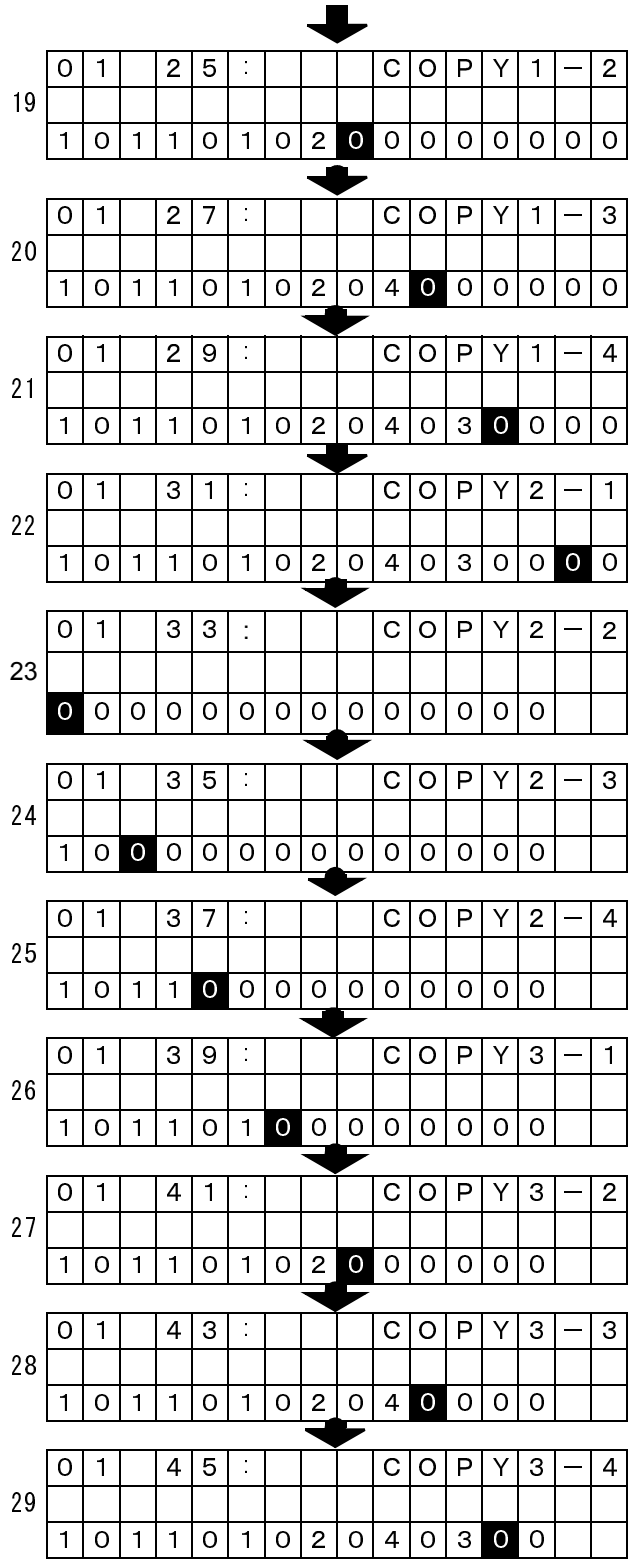


Enter value in one digit for an absence of a copy function, an issuance of copy, or a reception of copy.

18



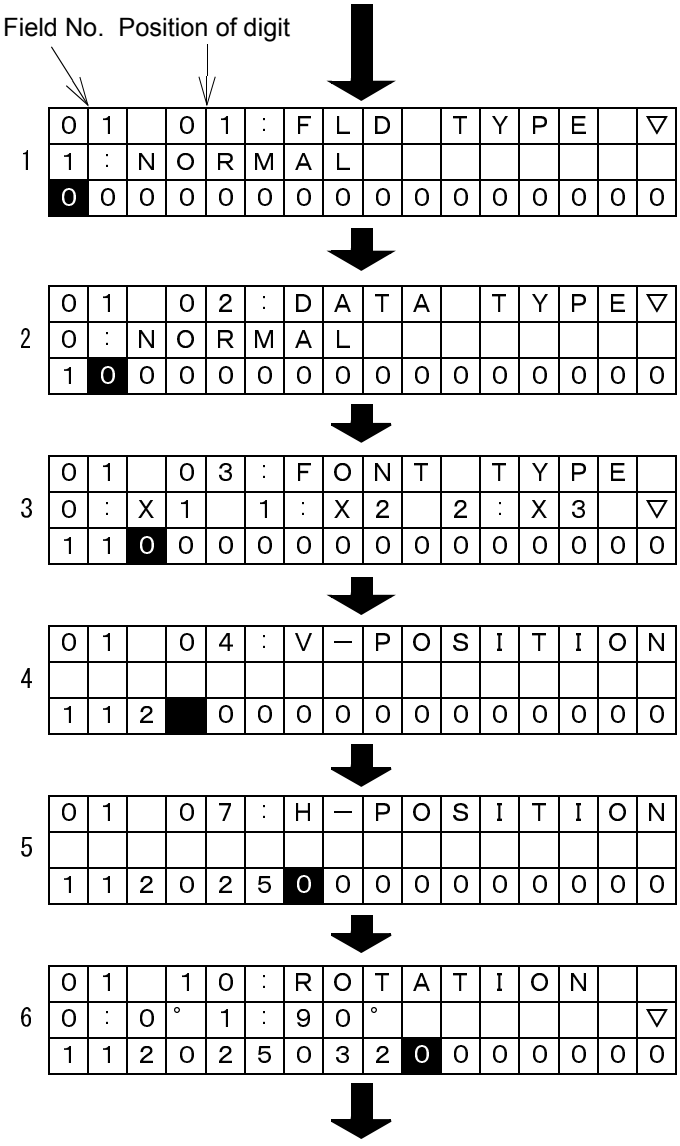
Enter value in 2 digits for the first position to specify the range of copying characters.



Note 1) The entry for copy is common to the fields of “Normal”, “Normal/Table Data”, “Normal/Sequential Number”, “Price”, and “Bar Code” on the screen.

Note 2) Where “0” is entered on the 22nd digit, the subsequent item automatically displays “0”.

DISPLAY ON THE SCREEN FOR FORMAT/TABLE DATA FIELD.



Enter “1” for the field type.

Enter “0” for the data type.

Value in one digit can be entered for the character type.
Select the value from “0”, “1”, “2”, and “4”.

Value in 3 digits can be entered for the vertical position:
Select the values from “001” to “784”.
Note: “000” is a field where only entry is required, so that no print is made.

Value in 3 digits can be entered for the horizontal position: Select the values from “001” to “384”.

Value in one digit can be entered for the rotation:
Select the value from “0”, “1”, “2”, and “3”.

It will go to the entry for character pitch.

Note: Use [FMT] to return to the entry of the format number to be registered.
Press [ENTR] to determine the data selected, so that the screen for entry can be appeared.

7

0	1		1	1	:	C	H	A	R		P	I	T	C	H
1	1	2	0	2	5	0	3	2	0	**2**	0	0	0	0	0

Value in one digit can be entered for spacing between characters: Select the value from “0” to “9”.

8

0	1		1	2	:	C	H	A	R		C	O	U	N	T
1	1	2	0	2	5	0	3	2	0	2	**0**	0	0	0	0

Value in 2 digits can be entered for the number of characters: Select the values from “01” to “32”.

9

0	1		1	4	:	V	—	E	X	P	A	N	S	E	
1	1	2	0	2	5	0	3	2	0	2	0	8	**0**	0	0

Value in one digit can be entered for the magnification of vertical expansion: Select the value from “1" to”4”.

10

0	1		1	5	:	H	—	E	X	P	A	N	S	E	
1	1	2	0	2	5	0	3	2	0	2	0	8	1	**0**	0

Value in one digit can be entered for the magnification of horizontal expansion: Select the value from “1" to”4”.

11

0	1		1	6	:	I	N	P	U	T	C	H	E	C	K
0	:	N	O		C	H	E	C	K						▽
1	1	2	0	2	5	0	3	2	0	2	0	8	1	1	**0**

Value in one digit can be entered for the input check: Select “0” or “2”.

12

0	1		1	7	:	S	E	T		T	I	T	L	E	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Title can be displayed:
(Note: It will be displayed in only one field per format.)

13

0	1		1	8	:	T	A	B	L	E		N	o		
1	:	T	A	B	L	E	1								▽
1	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Value in one digit can be entered for the table No.: Select the value from “1”, “2”, and “3”.

14

0	1		1	9	:	0		A	U	T	O	—	I	N	S
1	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0

Value in one digit can be entered for with or without 0 insertion: Select “0” or “1”.

15

0	1		2	0	:	P	R	E	S	E	T				
0	:	O	F	F		1	:	O	N						
1	0	1	**0**	0	0	0	0	0	0	0	0	0	0	0	0

Value in one digit can be entered for preset: Select “0” or “1”.

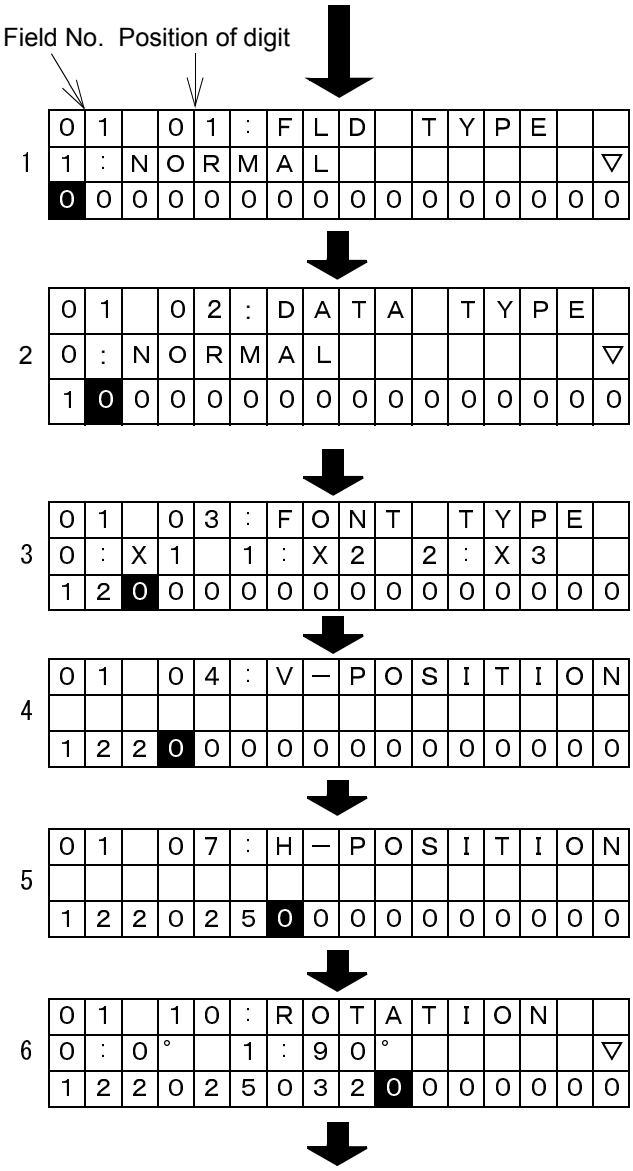
16

0	1		2	1	:	C	O	L	O	R					
0	:	B	L	A	C	K		3	:	R	E	D			▽
1	0	1	1	**0**	0	0	0	0	0	0	0	0	0	0	0

Value in one digit can be entered for print color. Select from “0”, “3”, and “4”.

It will go to the entry for copy.

DISPLAY ON THE SCREEN FOR NORMAL/SEQUENTIAL NUMBER FIELD



1 Enter “1” for the field type.

2 Enter “2” for the data type.

3 Value in one digit can be entered for the character type.
Select the value from “0”, “1”, “2”, and “4”.

4 Value in 3 digits can be entered for the vertical position:
Select the values from “001” to “784”.
Note: “000” is a field where only entry is required, so that no print is made.

5 Value in 3 digits can be entered for the horizontal position: Select the values from “001”to “384”.

6 Value in one digit can be entered for the rotation:
Select the value from “0”, “1”, “2”, and “3”.

It will go to the entry for character pitch.

Note: Use [FMT] to return to the entry of the format number to be registered.
Press [ENTR] to determine the data selected, so that the entry for fixed data can be reached.

7

01	11:CHAR PITCH
1220250320 **2** 0000	

Value in one digit can be entered for spacing between characters: Select the value from “0” to “9”.

8

01	12:CHAR COUNT
1220250320 **2** 0000	

Value in 2 digits can be entered for the number of characters: Select the values from “01” to “32”.

9

01	14:V-EXPANSE
1220250320208 **0** 00	

Value in one digit can be entered for the magnification of vertical expansion: Select the value from “1” to “4”.

10

01	15:H-EXPANSE
1220250320208 1 **0** 0	

Value in one digit can be entered for the magnification of horizontal expansion: Select the value from “1” to “4”.

11

01	16:INPUTCHECK
6:FULL	NUMELIC
1020250320208 1 1 **0**	

Value in one digit can be entered for the input check: Select the value from “5”, “6”, “8” and “9”.

12

01	17:SEQ
0:SEQUENCE	NONE▽
0 0000000000000000	

Value in one digit can be entered for the table of sequential No.: Select the value from “1” to “9”.

13

01	18:0 RESERVED
1 **0** 0000000000000000	

“0” is fixed.

14

01	19:0 AUTO-INS
10 **0** 0000000000000000	

Value in one digit can be entered for with or without 0 insertion: Select “0” or “1”.

15

01	20:PRESET
0:OFF	1:ON
101 **0** 000000000000	

Value in one digit can be entered for preset: Select “0” or “1”.

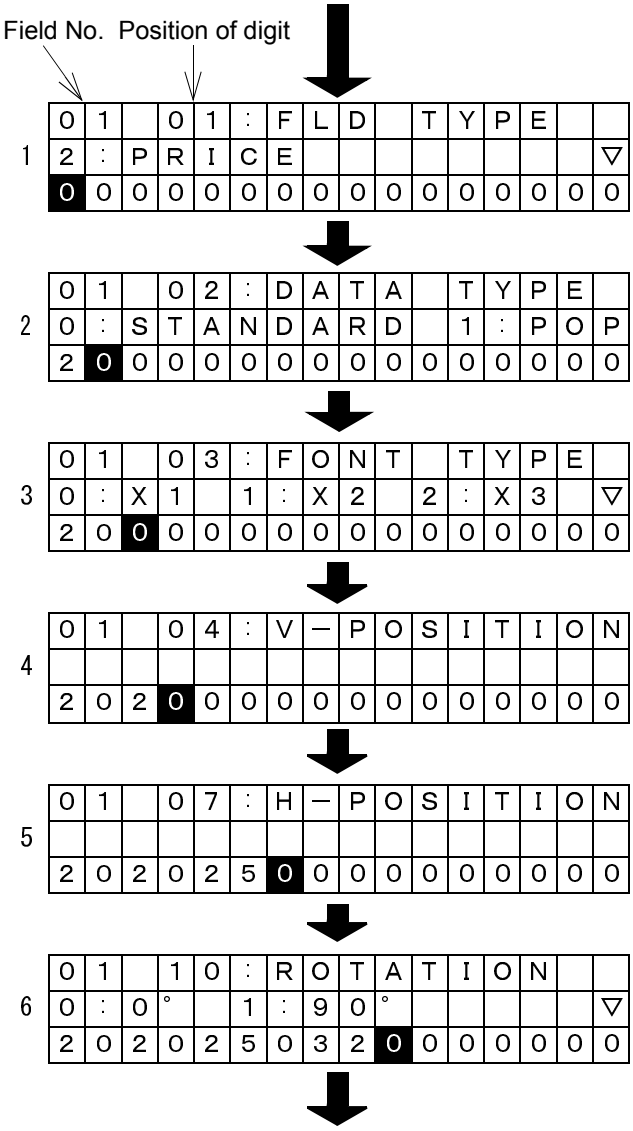
16

01	21:0 RESERVED
1011 **0** 000000000000	

“0” is fixed.

It will go to the entry for copy.

DISPLAY ON THE SCREEN FOR PRICE FIELD



Enter “2” for the field type.

For the data type:
1) Enter “0” in case of Standard.
2) Enter “1” in case of POP.

Value in one digit can be entered for the character type:
1) For Standard, select the value from “0”, “1”, “2”, and “5”.
2) For POP, select from “0”, “1”, and “2”.

Value in 3 digits can be entered for the vertical position:
Select the values from “001” to “784”.
Note: “000” is a field where only entry is required, so that no print is made.

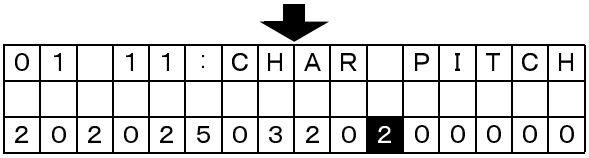
Value in 3 digits can be entered for the horizontal position: Select the values from “001”to “384”.

Value in one digit can be entered for the rotation:
Select the value from “0”, “1”, “2”, and “3”.

It will go to the entry for character pitch.

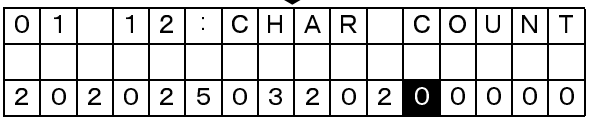
Note: Use [FMT] to return to the entry of the format number to be registered.
Press [ENTR] to determine the data selected, so that the entry for fixed data can be reached.

7



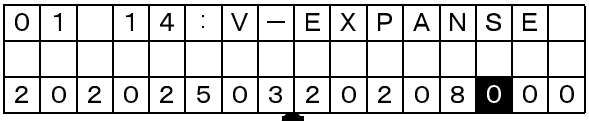
Value in one digit can be entered for spacing between characters: Select the value from “0” to “9”.

8



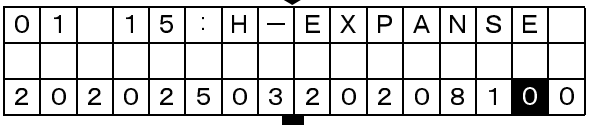
Value in 2 digits can be entered for the number of characters: Select the values from “01” to “10”.

9



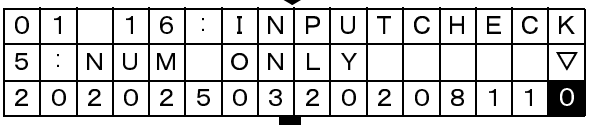
Value in one digit can be entered for the magnification of vertical expansion: Select the value from “1” to “4”.

10



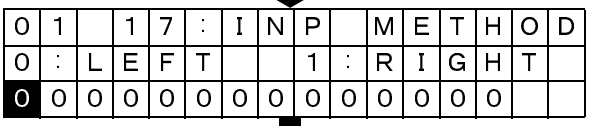
Value in one digit can be entered for the magnification of horizontal expansion: Select the value from “1” to “4”.

11



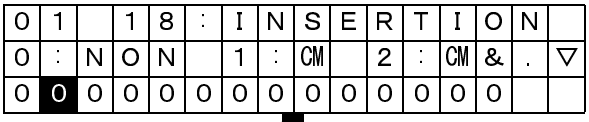
Value in one digit can be entered for the input check: Select the value from “5”, “6”, and “7”.

12



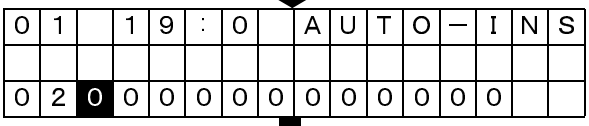
Value in one digit can be entered for the input method: Select “0” or “1”.

13



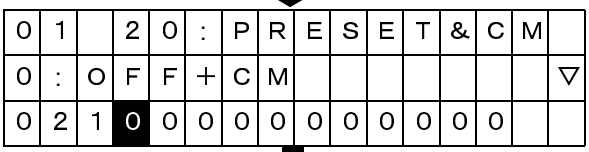
Value in one digit can be entered for the presentation method: Select the value from “0”, “1”, “2”, “5”, “6”, and “7”.

14



Value in one digit can be entered for with or without 0 insertion: Select “0” or “1”.

15



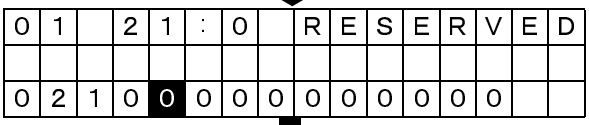
Value in one digit can be entered for entering the preset and switching Euro currency mark: Enter the value from “0”, “1”, “8”, and “9”.

0: No entry, so that general currency mark is not shown.

1: Entry required, so that general currency mark is shown.

8: No entry, so that Euro currency mark is not shown.

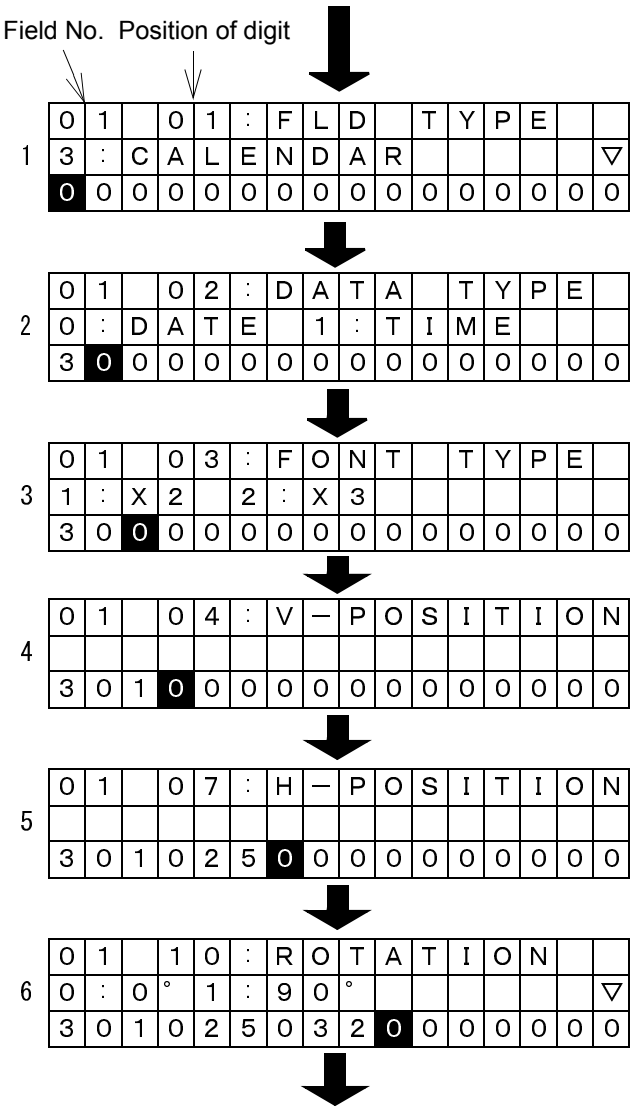
16



“0” is fixed. Press [ENTR].

It will go to the entry for copy.

DISPLAY ON THE SCREEN FOR CALENDAR FIELD



1 Enter “3” for the field type.

2 Enter “0” or “1” for the data type.

3 Value in one digit can be entered for the character type. Select “1” or “2”.

4 Value in 3 digits can be entered for the vertical position: Select the values from “001” to “784”.
Note: “000” is a field where only entry is required, so that no print is made.

5 Value in 3 digits can be entered for the horizontal position: Select the values from “001” to “384”.

6 Value in one digit can be entered for the rotation: Select the value from “0”, “1”, “2”, and “3”.

It will go to the entry for character pitch.

Note: Use [FMT] to return to the entry of the format number to be registered.
Press [ENTR] to determine the data selected, so that the entry for fixed data can be reached.

7

01	11:CHAR PITCH
30102503202	0000

Value in one digit can be entered for spacing between characters: Select the value from “0” to “9”.

8

01	12:CHAR COUNT
30102503202	0000

Value in 2 digits can be entered for the number of characters: Select the values from “01” to “32”.

01	14:V-EXPANSE
30102503202	0800

Value in one digit can be entered for the magnification of vertical expansion: Select the value from “1” to “4”.

10

01	15:H-EXPANSE
30102503202	0810

Value in one digit can be entered for the magnification of horizontal expansion: Select the value from “1” to “4”.

11

01	16:INPUTCHECK
6:NUMBER	ONLY ▽
30102503202	0811

Value in one digit can be entered for the input check: Select “6” or “7”.

12

01	17:INCREMENT
00000000000	0000

Value in one digit can be entered for the addition: Select “0” or “1”.

13

01	18:DISP METHD
0:ddmmyy	▽
10000000000	0000

Valid in one digit can be entered for the presentation method: Follow the spec. for setting.

14

01	19:SEPARATOR
0:NONE 1:/	▽
10000000000	0000

Value in one digit can be entered for the separator: Select the value from “1” to “4”.

15

01	20:PRESET
0:OFF 1:ON	
10100000000	0000

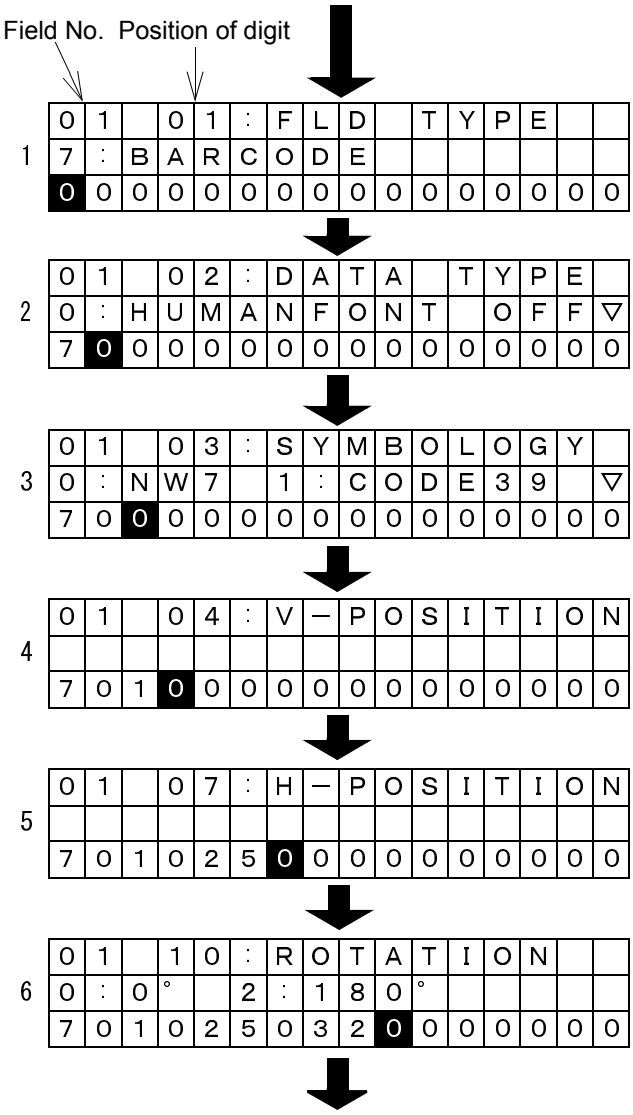
Value in one digit can be entered for preset: Select “0” or “1”.

16

01	21:0 RESERVED
10110000000	0000

“0” is fixed.

DISPLAY ON THE SCREEN FOR BARCODE FIELD



1 Enter “7” for the field type.

2 Value in one digit can be entered for the data type: Select “0” or “1”.

3 Value in one digit can be entered for the bar code type: Select the value from “0” to “7”.

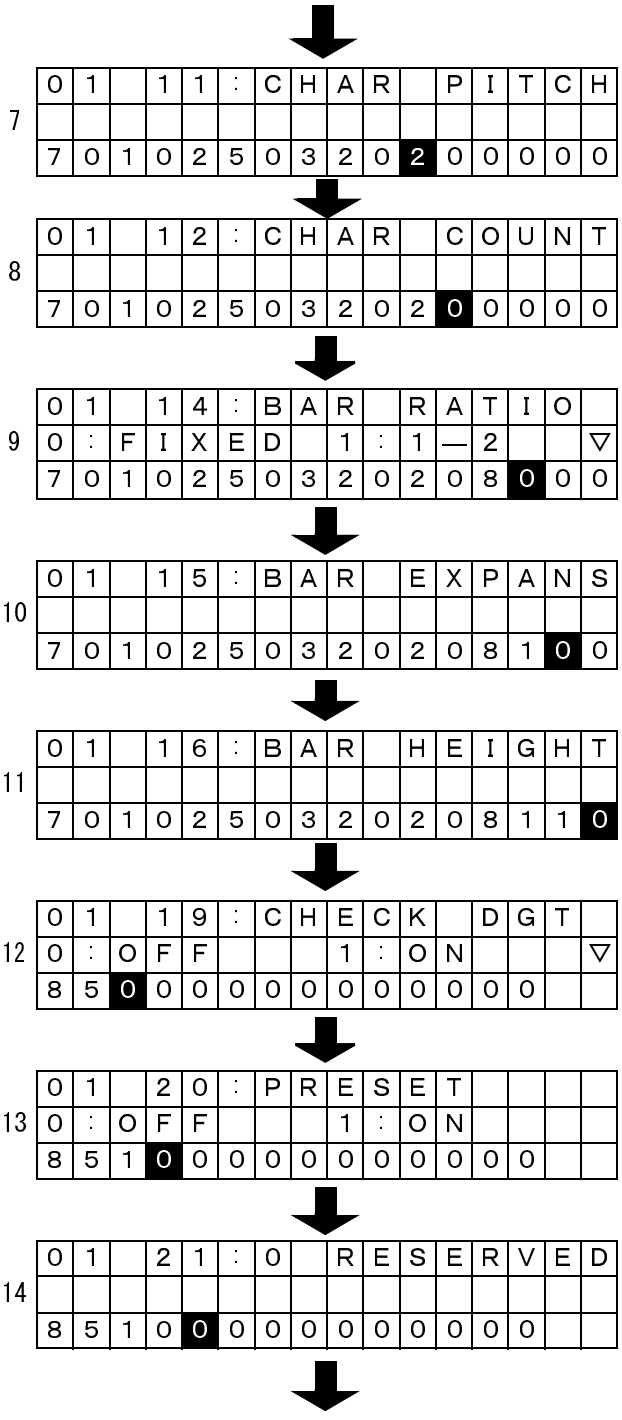
4 Value in 3 digits can be entered for the vertical position: Select the values from “001” to “784”.
Note: “000” is a field where only entry is required, so that no print is made.

5 Value in 3 digits can be entered for the horizontal position: Select the values from “001”to “384”.

6 Value in one digit can be entered for the rotation: Select “0” or “2”.

It will go to the entry for character pitch.

Note: Use [FMT] to return to the entry of the format number to be registered.
Press [ENTR] to determine the data selected, so that the entry for fixed data can be reached.



Value in one digit can be entered for spacing between characters in human readable information: Select the value from “0” to “9”.

Value in 2 digits can be entered for the number of characters: Select the values from “01” to “22”.

Value in one digit can be entered for the bar ratio: Select the value from “0”, “1”, “2”, and “3”.

Value in one digit can be entered for the bar ratio: Select the value from “2”, “3”, and “4”.

Value in 3 digits can be entered for the bar height: Select the values from “001” to “240”.

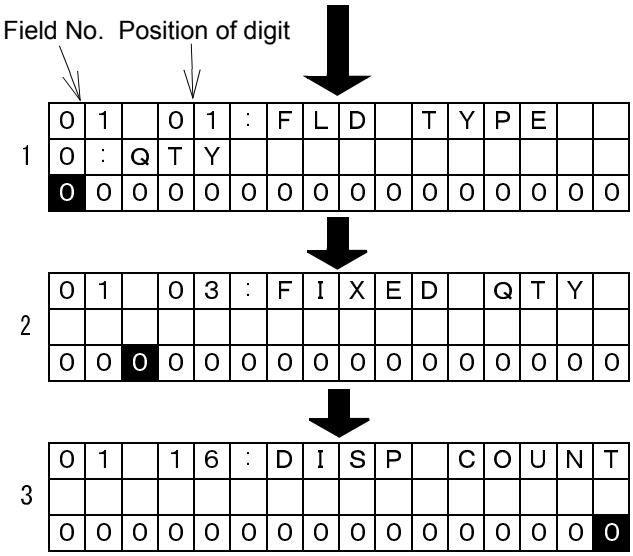
Value in one digit can be entered for the check digit: Select the value from “0”, “1”, “2”, and “3”.

Value in one digit can be entered for preset: Select “0” or “1”.

“0” is fixed.

It will go to the entry for copy.

DISPLAY ON THE SCREEN FOR NUMBER OF PRINTING



1 Enter “00” for the field type.

2 Value in one digit can be entered for the number of printing to be fixed: Select “0” or “1”.

3 Value in one digit can be entered for the count method in the dispense mode: Select “0” or “1”.

Note: Press [ENTR], so that the entry for the format number to be registered can be reached.

SECTION 5 : PRESET, TABLE DATA

INTRODUCTION

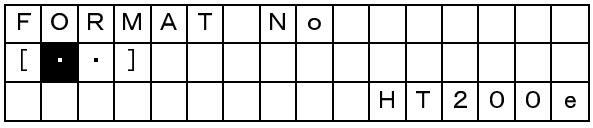
This section is to assist you in using about “PRESET, TABLE ”. The following information is provided in this section.

INTRODUCTION 5-1
PRESET 5-2
- PRESET DATA REGISTRATION
- PRINTING OF PRESET DATA
- MODIFICATION OF PRESET DATA
- DELETION OF PRESET DATA
- DUMP PRINTING FOR PRESET DATA
- MASTER LABEL PRINTING FOR PRESET DATA

TABLE DATA 5-10
- REGISTRATION FOR TABLE DATA
- MODIFICATION FOR TABLE DATA
- DELETION FOR TABLE DATA

PRESET

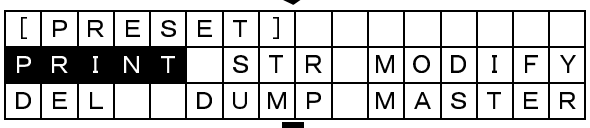
1



[RCL]

Press [RCL], so that it goes from the modes of the print to the preset.

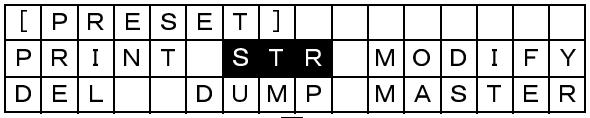
2



[→]

The screen for the selection of preset printing will be displayed: Press [→], so that it goes to the process No. 3. Press [ENTR], so that it goes to the entry of preset number.

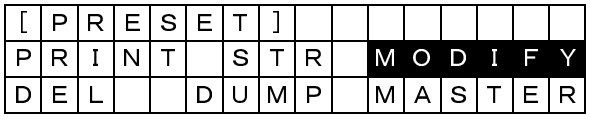
3



[→]

The screen for the selection of preset storing will be displayed: Press [→], so that it goes to the process No.4. Press [ENTR], so that it goes to the entry of preset number.

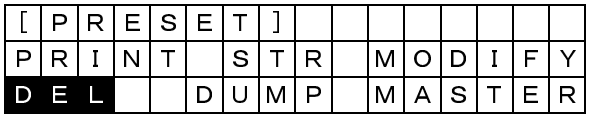
4



[←],[←], [↓]

The screen for the selection of preset modification will be displayed: Press [←], [←], [↓], so that it goes to the process No. 5. Press [ENTR], so that it goes to the entry of preset number.

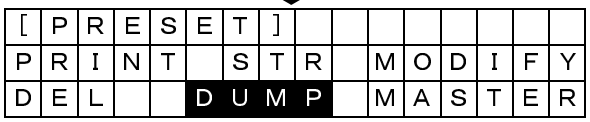
5



[→]

The screen for the selection of preset deletion will be displayed: Press [→], so that it goes to the process No. 6. Press [ENTR], so that it goes to the entry of preset number.

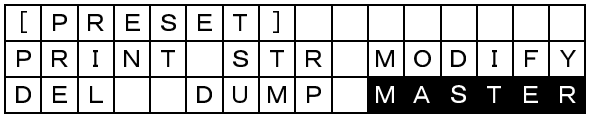
6



[→]

The screen for the selection of preset dump will be displayed: Press [→], so that it goes to the process No.7. Press [ENTR], so that it goes to the entry of preset number.

7

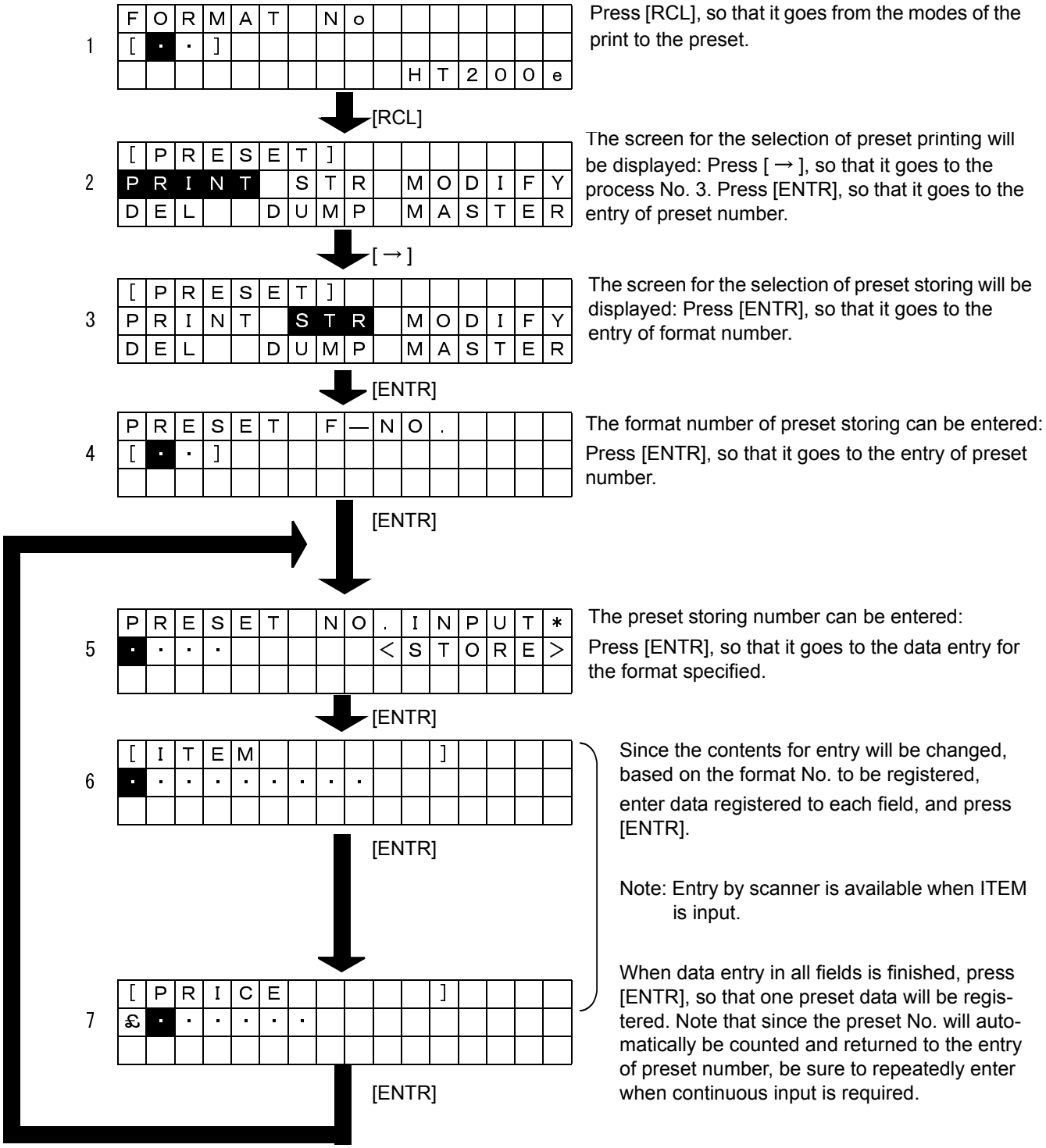


The screen for the selection of preset master will be displayed: Press [→], so that it goes to the process No. 2. Press [ENTR], so that it goes to the entry of preset number.

Note 1:The largest number of preset registration, combined with the fixed and free formats, will be: 300 in a printer; 1,000 in 1Mbyte memory card; 2,000 in 2Mbyte memory card.

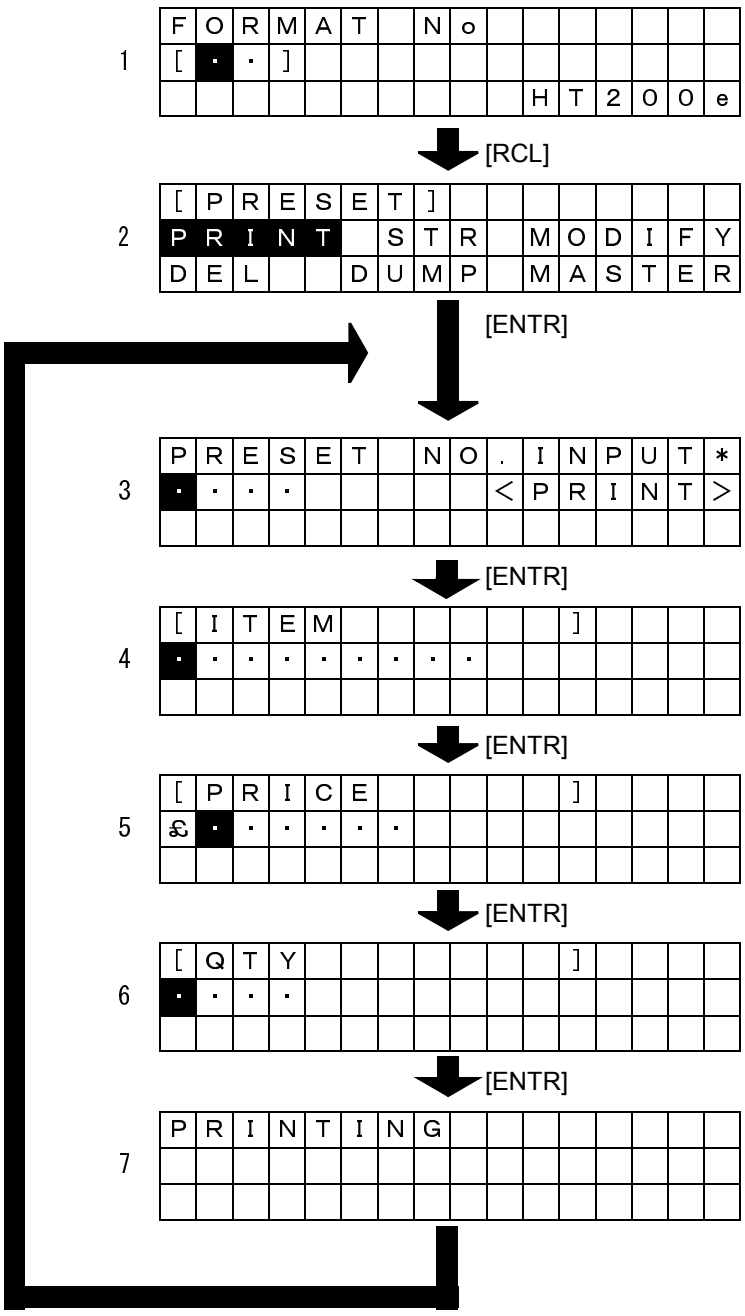
Note 2:Any format must be registered when the registration and print is performed for preset. In the event that the format is changed, preset must be changed corresponding to it.

PRESET DATA REGISTRATION



Note: Where asterisk mark or "*" can be seen in the upper right on the screen, entry by scanner can be made possible.

PRINTING OF PRESET DATA



Press [RCL], so that it goes from the modes of the print to the preset.

The screen for the selection of preset printing will be displayed: Press [ENTR], so that it goes to the entry of preset number.

The preset No. that is required to print can be entered: Press [ENTR], so that it displays the preset data specified.

Since the contents of data differ, based on the format number retrieved, press [ENTR] by checking data in each field.

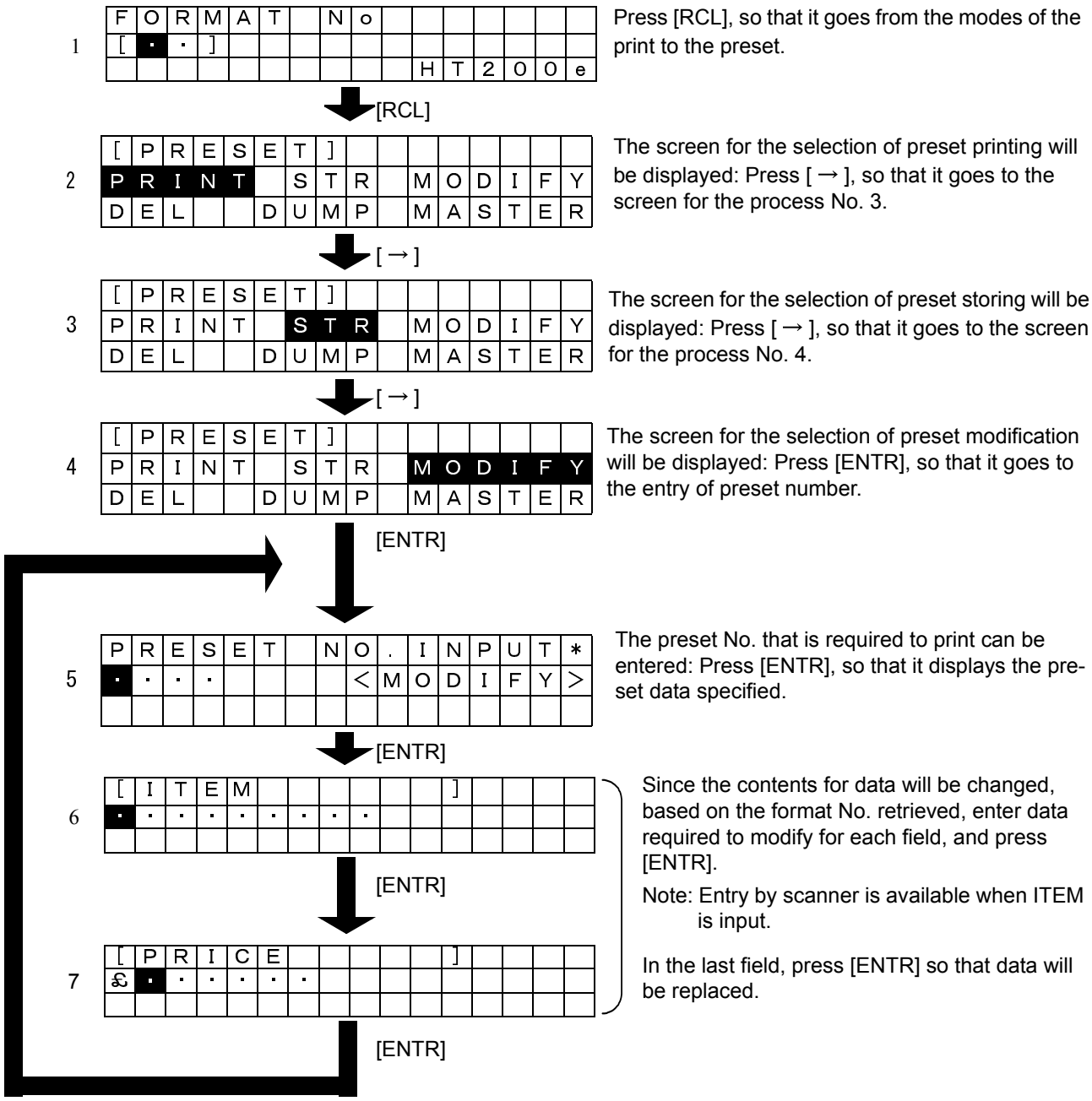
Enter the No. of paper within 4 digits, and press [ENTR]. Note that neither 0 nor un-entry is permitted.

Preset will start printing:

Note: where the No. of print becomes 0, it goes back to the process No. 3.

Note: Where asterisk mark or “*” can be seen in the upper right on the screen, entry by scanner can be made possible.

MODIFICATION OF PRESET DATA



Press [RCL], so that it goes from the modes of the print to the preset.

The screen for the selection of preset printing will be displayed: Press [→], so that it goes to the screen for the process No. 3.

The screen for the selection of preset storing will be displayed: Press [→], so that it goes to the screen for the process No. 4.

The screen for the selection of preset modification will be displayed: Press [ENTR], so that it goes to the entry of preset number.

The preset No. that is required to print can be entered: Press [ENTR], so that it displays the preset data specified.

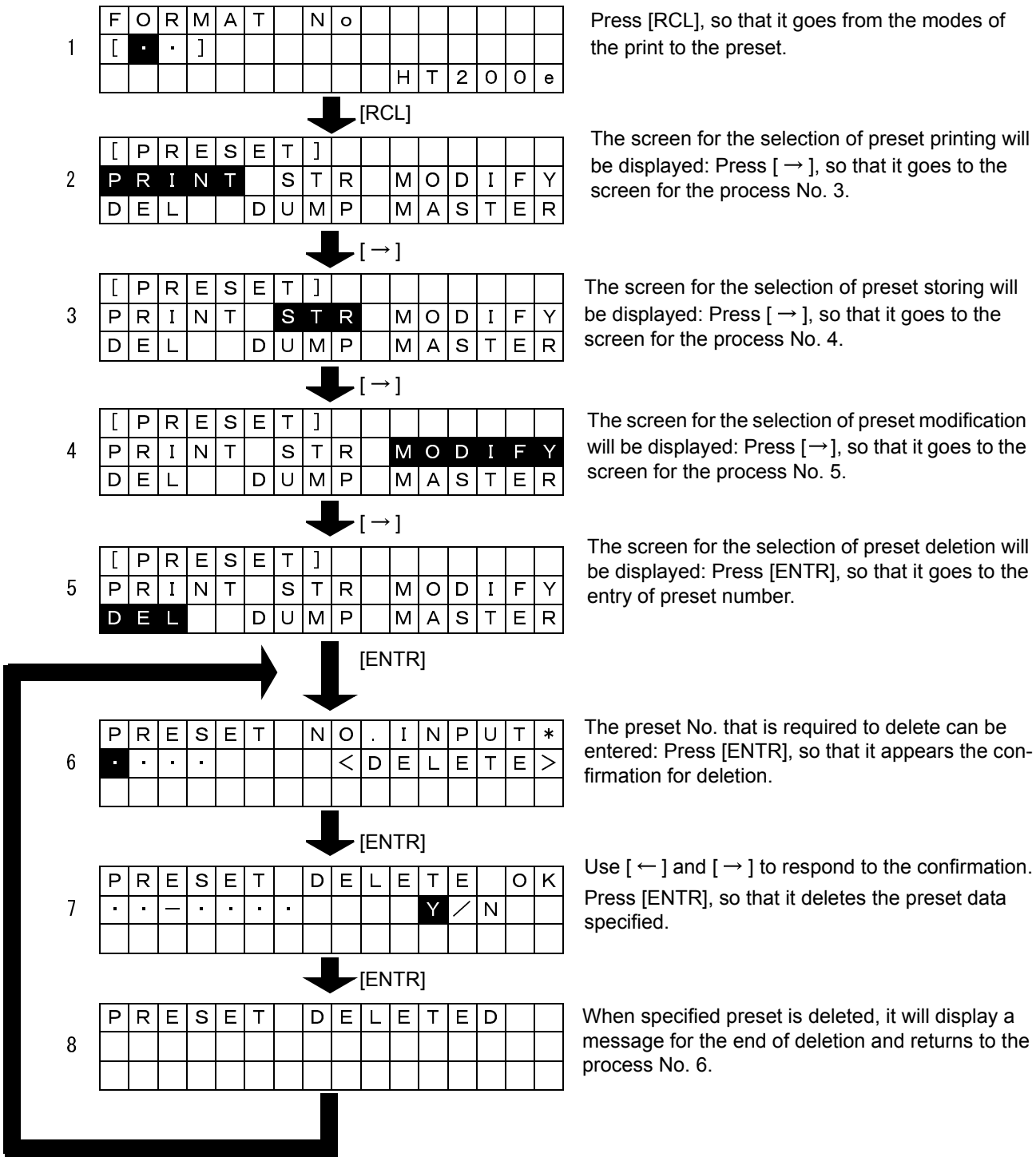
Since the contents for data will be changed, based on the format No. retrieved, enter data required to modify for each field, and press [ENTR].

Note: Entry by scanner is available when ITEM is input.

In the last field, press [ENTR] so that data will be replaced.

Note: Where asterisk mark or "*" can be seen in the upper right on the screen, entry by scanner can be made possible.

DELETION OF PRESET DATA



Press [RCL], so that it goes from the modes of the print to the preset.

The screen for the selection of preset printing will be displayed: Press [→], so that it goes to the screen for the process No. 3.

The screen for the selection of preset storing will be displayed: Press [→], so that it goes to the screen for the process No. 4.

The screen for the selection of preset modification will be displayed: Press [→], so that it goes to the screen for the process No. 5.

The screen for the selection of preset deletion will be displayed: Press [ENTR], so that it goes to the entry of preset number.

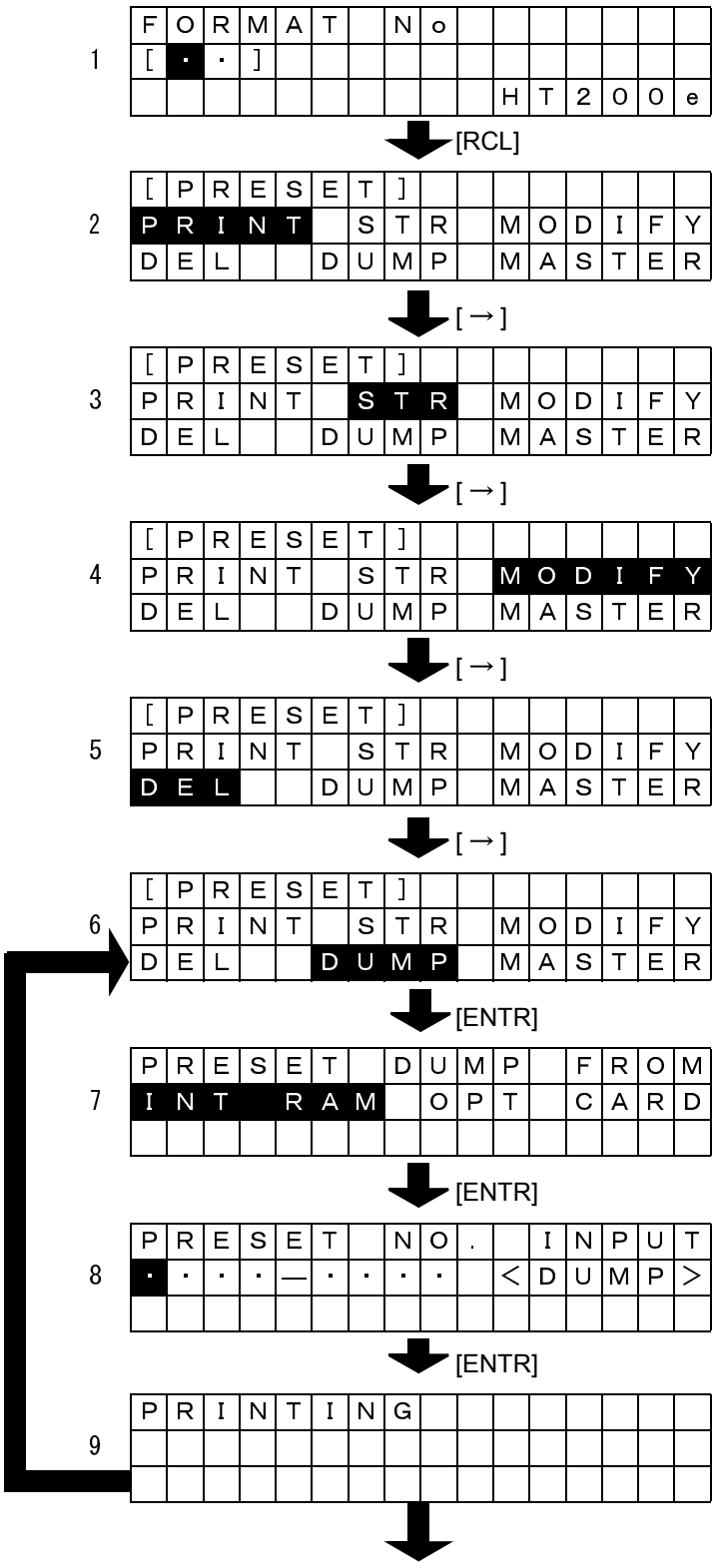
The preset No. that is required to delete can be entered: Press [ENTR], so that it appears the confirmation for deletion.

Use [←] and [→] to respond to the confirmation. Press [ENTR], so that it deletes the preset data specified.

When specified preset is deleted, it will display a message for the end of deletion and returns to the process No. 6.

Note: Where asterisk mark or "*" can be seen in the upper right on the screen, entry by scanner can be made possible.

DUMP PRINTING FOR PRESET DATA



Press [RCL], so that it goes from the modes of the print to the preset.

The screen for the selection of preset printing will be displayed: Press [→], so that it goes to the screen for the process No. 3.

The screen for the selection of preset storing will be displayed: Press [→], so that it goes to the screen for the process No. 4.

The screen for the selection of preset modification will be displayed: Press [→], so that it goes to the screen for the process No. 5.

The screen for the selection of preset deletion will be displayed: Press [→], so that it goes to the screen for the process No. 6.

The screen for the selection of preset dump will be displayed: Press [ENTR], so that it goes to the entry of preset number.

Use [←] and [→] to select the destination for preset storing, where dump will be printed.

The preset No. that is required to print dump can be entered: Press [ENTR] so that it prints dump for area that preset data are specified.

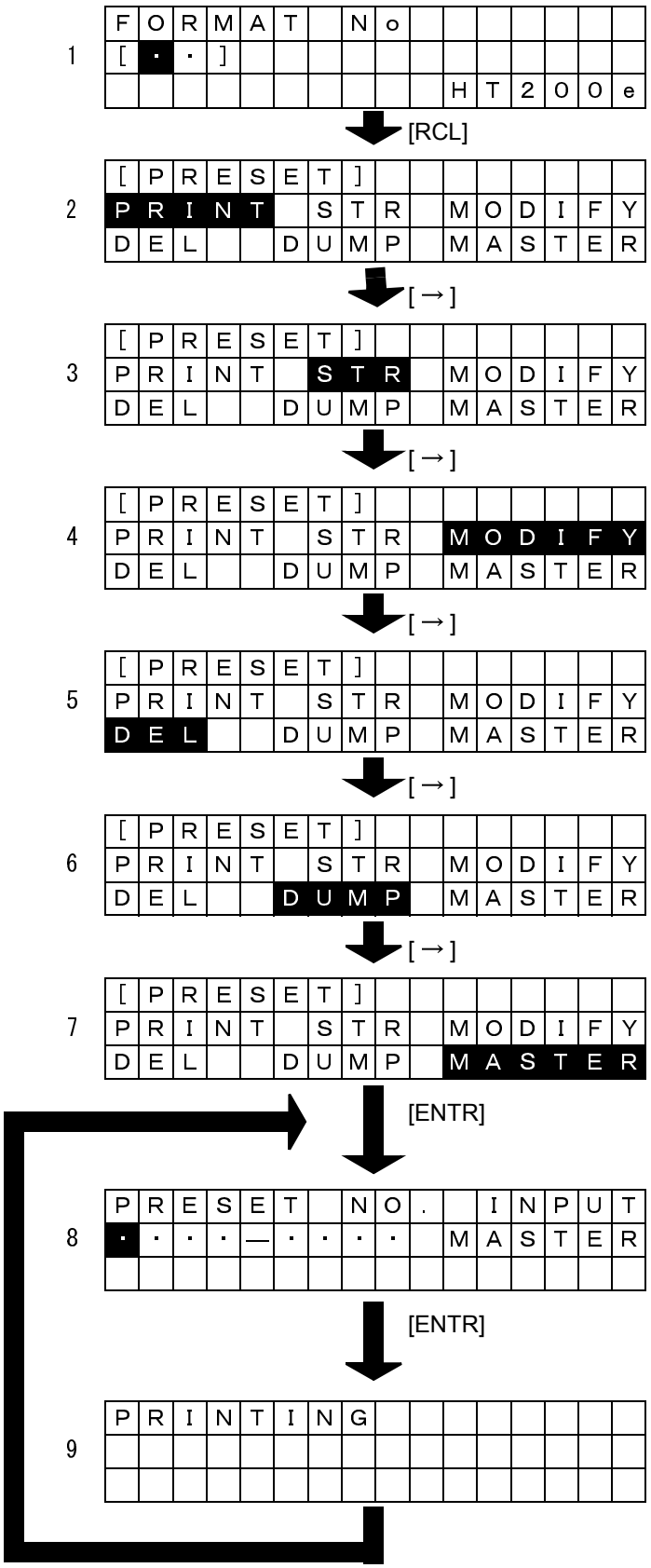
Note that if [ENTR] is pressed without entering a preset No., the preset data registered will be printed from the beginning.

While the dump is being printed, the screen of the process No. 9 remains displayed. When print is complete, it returns to the process No. 6.

Press [S/S], so that it suspends. Whereas pressing [FMT] terminates to print.

Note: Where, in the format for different sizes of label, dump is printed for preset data, proper print may not be gained. To avoid this situation, specify area for the preset data that are registered with the format of same size of label.

MASTER LABEL PRINTING FOR PRESET DATA



Press [RCL], so that it goes from the modes of the print to the preset.

The screen for the selection of preset printing will be displayed: Press [→], so that it goes to the screen for the process No. 3.

The screen for the selection of preset storing will be displayed: Press [→], so that it goes to the screen for the process No. 4.

The screen for the selection of preset modification will be displayed: Press [→], so that it goes to the screen for the process No. 5.

The screen for the selection of preset deletion will be displayed: Press [→], so that it goes to the screen for the process No. 6.

The screen for the selection of preset dump will be displayed: Press [→], so that it goes to the screen for the process No. 7.

The screen for the selection of preset master will be displayed: Press [ENTR], so that it goes to the entry of preset number.

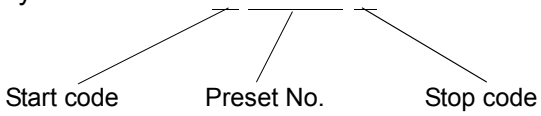
The preset No. that is required to print master label can be entered: Press [ENTR], so that it prints master label for the preset specified.

Note that if [ENTR] is pressed without entering a preset No., the preset data registered will be printed from the beginning.

While master label is being printed, the screen of the process No. 9 remains displayed. When print is complete, it returns to the process No. 8.

For a label of P25.4mm x W32mm, as a standard size, print can be made:

An array of barcode: * 0 0 0 1 *



AAAAAAAAAAA: Item name

[A sample of print]

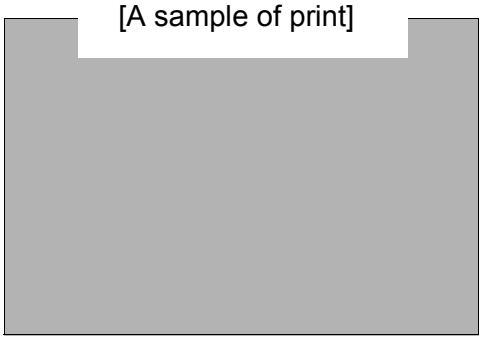
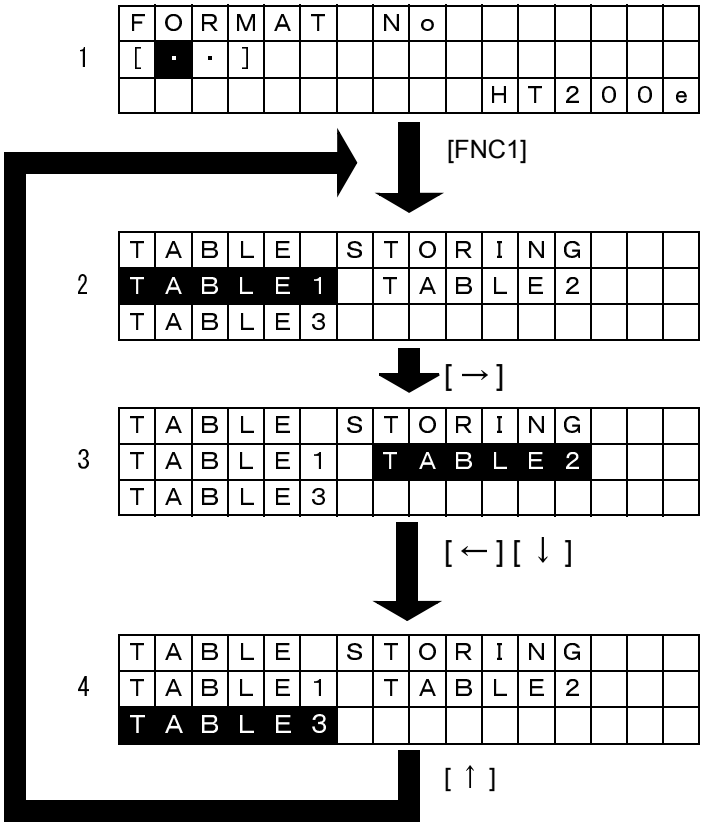


TABLE DATA



Press [FNC1], so that it goes from the modes of the print of format to the table data.

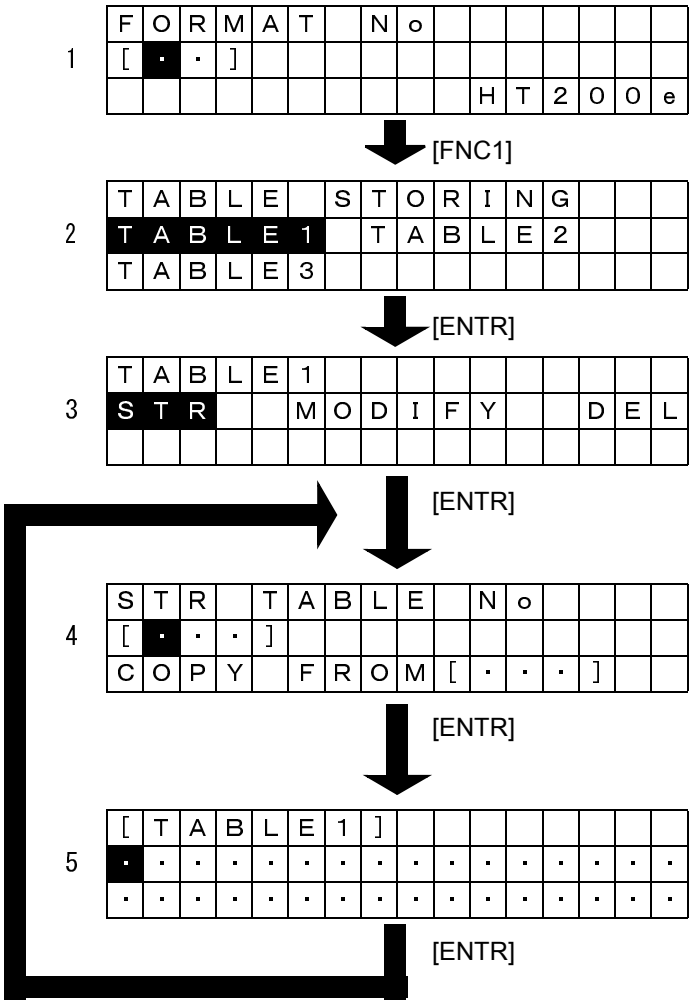
The screen for the selection of data registration area 1 will be displayed: Press [→], so that it goes to the screen for the process No. 3. Whereas [ENTR] is pressed, it goes to the selection for table data registration.

The screen for the selection of data registration area 2 will be displayed: Use [←] and [↓], so that it goes to the screen for the process No. 4. Whereas [ENTR] is pressed, it goes to the selection for table data registration.

The screen for the selection of data registration area 3 will be displayed: Press [↑], so that it goes to the screen for the process No. 2. Whereas [ENTR] is pressed, it goes to the selection for table data registration.

Note: The largest number of table data registration will be: Table 1; 200 (1 to 200), Table 2; 200 (1 to 200), and Table 3; 500 (1 to 500)

REGISTRATION FOR TABLE DATA



Press [FNC1], so that it goes from the modes of the print of format to the table data.

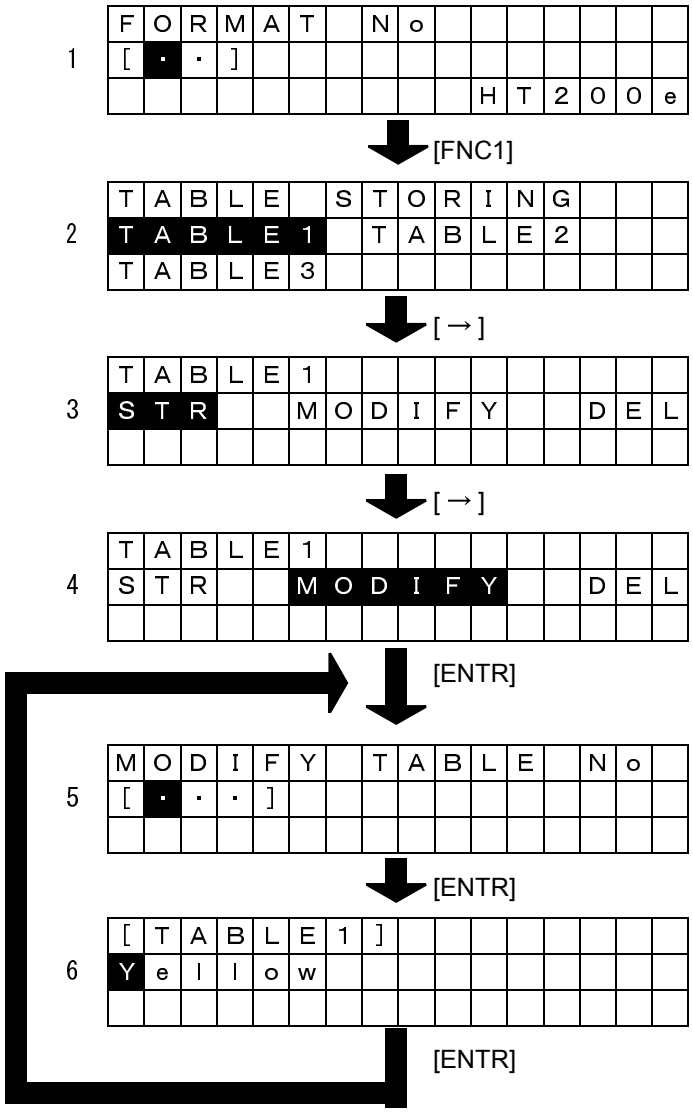
The screen for the selection of table data registration will be displayed: Press [ENTR], so that it goes to the entry of table number.

The screen for the selection of data registration area will be displayed: Press [ENTR], so that it goes to the selection for table data registration.

Table No. can be entered: Press [ENTR], so that it goes to the entry of table data. Whereas [SHFT] or [↓] is pressed, it goes to the entry of number for the copy table, which displays the table data already registered when entry is required.

Table data can be entered: Enter table data, and press [ENTR], so that one table data will be registered. Note that since the table No. will automatically be counted and returned to the entry of table number, be sure to repeatedly enter when continuous input is required.

MODIFICATION FOR TABLE DATA



Press [FNC1], so that it goes from the modes of the print of format to the table data.

The screen for the selection of table data registration will be displayed: Press [→], so that it goes to the screen for the process No. 4.

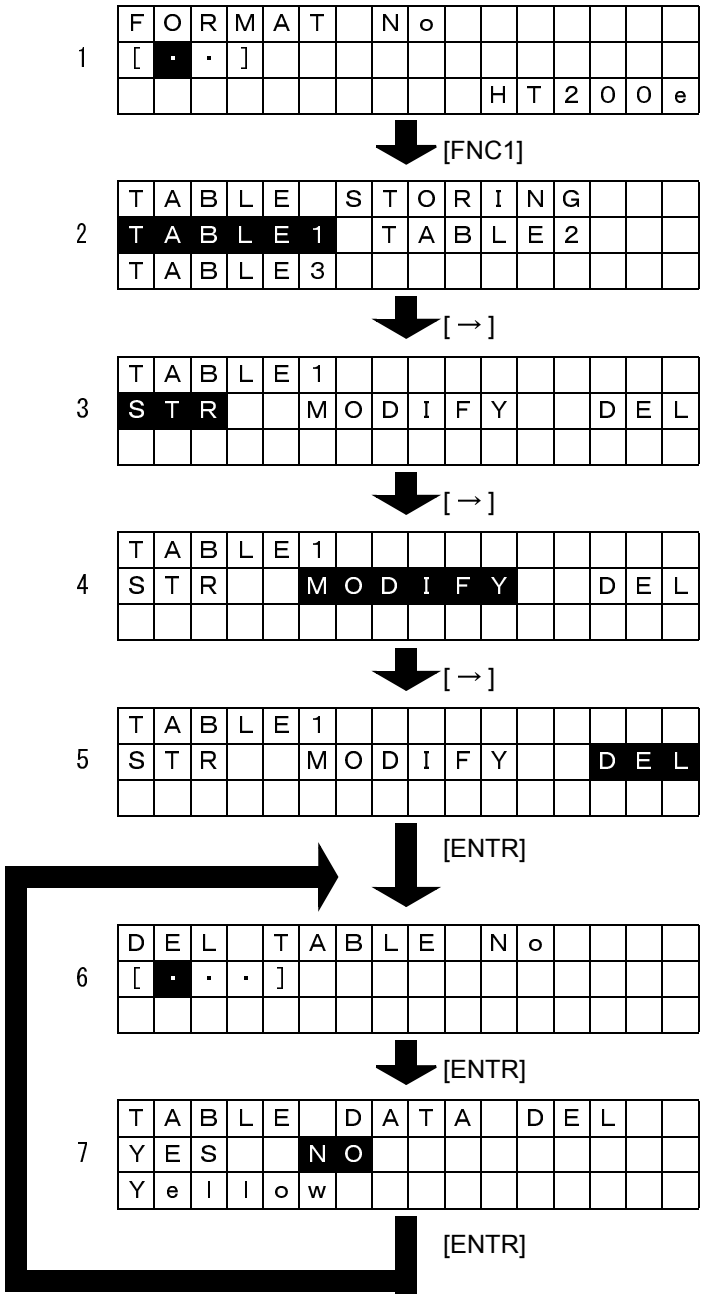
The screen for the selection of data registration area will be displayed: Press [ENTR], so that it goes to the selection for table data registration.

The screen for the selection of the modification of table data will be displayed: Press [ENTR], so that it goes to the entry of table number.

Table No. can be entered: Press [ENTR], so that it goes to the entry of table data.

Table data can be entered: Enter table data, and press [ENTR], so that one table data will be registered, returning to the entry of table number,

DELETION FOR TABLE DATA



Press [FNC1], so that it goes from the modes of the print of format to the table data.

The screen for the selection of data registration area will be displayed, in which the selection screen for the preset print will appear: Press [→], so that it goes to the screen for the process No. 3.

The screen for the selection of table data registration will be displayed: Press [→], so that it goes to the screen for the process No. 4.

The screen for the selection of table data modification will be displayed: Press [→], so that it goes to the screen for the process No. 5.

The screen for the selection of table data deletion willbe displayed: Press [ENTR], so that it goes to the screen for the process No. 6.

Table No. can be entered: Press [ENTR], so that it goes to the confirmation of table data deletion.

Use [←] and [→] to select for confirmation. Press [ENTR], so that it deletes the table data specified:

Pressing [↓]displays table data. Whereas pressing [←] and [→] shows table data for scrolling.

SECTION 6: ON LINE

INTRODUCTION

This section is to assist you in using about “ON LINE”. The following information is provided in this section.

ONLINE MAINTENANCE 6-2

ONLINE MAINTENANCE

SUMMARY

This specification describes such features as to connect a printer and a host computer via RS-232C, and register and page parameter and others. It also explains how to specify data that can be sent from a host to a printer.

Field:

This printer is so designed that it can select size of label and type of character or number, layout barcode, and set freely for customer preference. The data set, based on these needs, is called “field parameter”.

The parameter should be created at a host computer and forwarded to a printer. In this manner, parameter for labels can be registered.

STRUCTURE FOR COMMAND

1. Basic configuration

When command is sent to a printer, it consists of header, format No., field data, and trailer, all of which are designated in order:

Header・・・・・STX・<A>
Format No.・・ Format No. and data regulating print position (format and label names)
Field・・・ Field No., item name, parameter, and fixed data
・
・
・
・
Trailer・・・・・<Z>・ETX

Important: Some error can not be displayed up to 500 times (the number of receiving error) because there is occasion that uncontrollable signal can be received when opening and closing the line at a host.

2. Data regulating print position

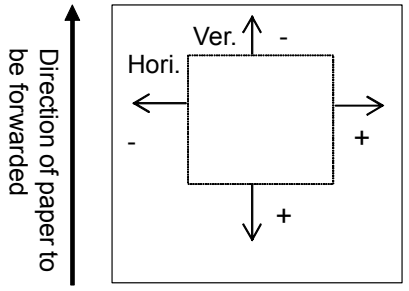
This command specifies value that regulates print position.

<M> ・[1B (H), 4D (H)] nnn ・・・・ n (32 bytes can be designated.)

E S C	M	Designation for vertical size of paper			Designation for horizontal size of paper		Type of paper	Regulation of vertical position			Regulation of horizontal position			Name of format			Name of label		
		1	2	3	4	5	6	7	8	9	10	11	12	13	to	22	23	to	32

Digit position	Item	Description
1 to 3	Designation for vertical size of paper	It is displayed in “mm”.
4 to 5	Designation for horizontal size of paper	It is displayed in “mm”.
6	Type of paper	It can select from the following: 1: NORMAL (Non-gap label for HT200e) 2: OPTION (M32 label)
7	Regulation of vertical position (Direction)	It designates direction that can be fine adjusted for print. Value; 1:+, 0: -
8 to 9	Regulation of vertical position (Volume of migration)	It designates unit for dot in numbers. 1 dot = 0.025mm
10	Regulation of horizontal position (Direction)	It designates direction that can be fine adjusted for print. Value; 1: +, 0: -
11 to 12	Regulation of horizontal position (Volume of migration)	It designates unit for dot in numbers. 1 dot = 0.025mm
13 to 22	Name of format	It specifies name of each format.
23 to 32	Name of label	It specifies name of label for each format.

[Direction that print position can be controlled]



Up to 5mm or 40 dots in all directions can be controlled. Note: Some position of print may vary the number of dot that is adjustable.

3. Transmission of field parameter and field data

Field parameter specifies item name, print position, and font type, from which filed data can be assigned for data on print.

The parameter and data shall be set on a field unit basis for sending. Up to 30 fields can be repeatedly specified.

- Item name can be designated by 10 bytes.
- Parameter can be designated by 46 bytes.
- Fixed data can be designated by 32 bytes.

Field No.		Item name										Parameter					Fixed data				
N	N	1	2	3	4	5	6	7	8	9	10	1	2	3	through	46	1	2	3		32

Field designation		Selectable font type
Digit position 1	2	3
1: Normal	0: Normal 1: Table data	0: X1 1: X2 2: X3 4: OCR-B
2: Price	0: Normal	0: X1 1: X2 2: X3 5: Character for price
	1: POP	1: POP0: POP1 1: POP2 2: POP3
3: Calendar	0: Date 1: Time	1: X2 2: X3
7: Barcode	0: Human readable information (HRI) is NOT available. 1: Human readable information (HRI) is available.	0: NW-7 1: CODE39 2: INT2of5 3: EAN13 4: EAN8 5: UPC-E 6: CODE128(C Set) 7: CODE128(A Set, B Set)

CONFIGURATION FOR DATA TO BE TRANSMITTED

1. Command for specifying medium

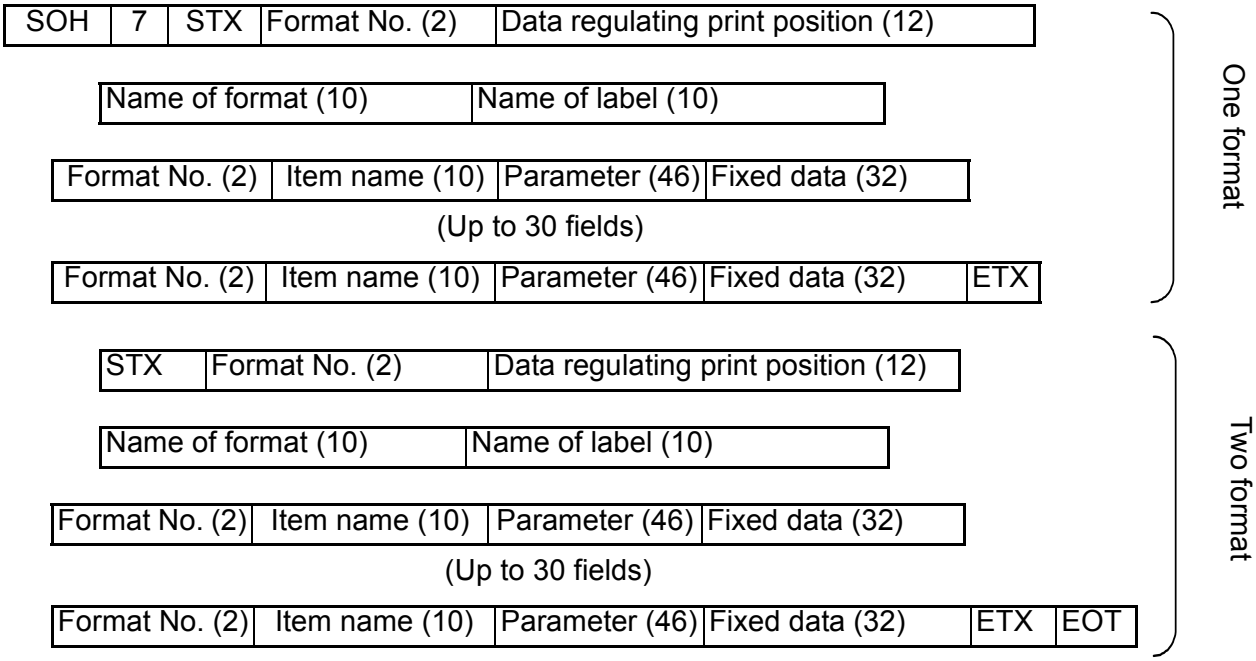
Where print parameter or preset data is sent, for each data to be transmitted, SOH + medium assignment shall be sent as header and EOT be transmitted as trailer. This sending is not on a field unit basis, and each command should be put at the head and end as described.

SOH	Medium assignment

Medium assignment	Description on data to be transmitted
"7"	Data on print parameter for HT200e
"9"	Preset data: The number can voluntarily be established from 0001 to 9999.
"H"	Data for table 1: The number can be assigned from 001 to 200.
"I"	Data for table 2: The number can be assigned from 001 to 200.
"J"	Data for table 3: The number can be assigned from 001 to 500.

2. Print parameter: It can be sent with DATA STORE/RECALL in data maintenance mode.

For one format, data to be transmitted will be enclosed within STX to ETX and sent on a unit format basis.



Important: The last field shall be set as the field for the number of paper. Parenthesis shows the number of byte for each term.

(1) Setting for data regulating print position

This can specify area for regulating print position, name of format, and name of label.

Dummy (6)	Vertical (3)	Horizontal (3)	Name of format (10)	Name of label (10)

Important: Parenthesis shows the number of byte for each item.

(2) Setting for fixed data

For fixed data, similar data in the entry screen for fixed data on HT200e shall be set.
Asterisk mark, a symbol for entry that can be displayed on the screen for HT200e will be 10H.

1) Normal field (normal): Set the number of characters and 10H (Entry symbol). Note that if 32 bytes can not be filled in this field, set 20H (Space).

2) Normal field (table data): Set “5BH 10H 10H 10H 5DH” and for the remaining 27 bytes, set 20H (Space).

3) Barcode field: Set the number of characters and 10H (Entry symbol). If 32 bytes can not be filled in this field, set 20H (Space). For C/D creation, set 43H (C) on its position. For CODE128, set start code or A SET(>G), B SET(>H), and C Set(>I)in the beginning of data. Note that code is not switchable in the process of data. In this code, human readable information can not be printed. A SET in this code, print for online can only is made.

4) Price field: In the beginning, set 24H ($) and then 10H for the No. of characters. If 32 bytes can not be filled in this field, set 20H (Space).

5) Calendar field (Addition of date): Set “5BH 10H 10H 10H 5DH” and for the remaining 27 bytes, set 20H (Space).

6) Calendar field (Addition of time): Set “5BH 10H 10H 10H 5DH” and for the remaining 28 bytes, set 20H (Space).

Important: On the screens of the normal field (table data) and calendar field, “5BH” is expressed in “[”, and “5DH” in “]”.

3. Sample of data to be sent

Format No.: 30 Vertical size of paper: 51mm

Horizontal size of paper: 48mm

Type of paper: Non-gap label for HT200e

Data regulating print position: Position is not regulated.

Name of format: PATTERN-A1

Name of label: 51*W:48

Field No.: 01 Item:

Vertical position; 020 dots, Horizontal position; 080 dots, Font type; X2, 15 digits

Field No.: 02 EAN13 barcode (Flag 50 is fixed.)

Vertical position; 060 dot, Horizontal position; 040 dots, Bar height; 120 dots, C/D creation

Field No.: 03 Price:

Vertical position; 210 dots, Horizontal position; 090 dots, Font type; X1, Currency mark

Field No.: 04 No. of print

SOH	7	ST	3	0	0	5	1	4	8	1	0	0	0	0	0	0
01H	37H	X03	33H	30H	30H	35H	31H	34H	38H	31H	30H	30H	30H	30H	30H	30H

P	A	T	T	E	R	N	-	A	1
50H	41H	54H	54H	45H	52H	4E	2D	41H	31H

P	:	5	1	*	W	:	4	8	
50H	3A	35H	31H	2A	57H	3A	34H	38H	20H

0	1	I	T	E	M					
30H	31H	49H	54H	45H	4D	20H	20H	20H	20H	20H

1	0	1	0	2	0	0	8	0	0	2	1	5	1	1	0	0
31H	30H	31H	30H	32H	30H	30H	38H	30H	30H	32H	31H	35H	31H	31H	30H	30H

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H

0	0	0	0	0	0	0	0	0	0	0	0	0				
30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H				

*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
10H	10H	10H	10H	10H	10H	10H	10H	10H	10H	10H	10H	10H	10H	10H	10H	

20H	20H	20H	20H	20H	20H	20	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H

0	2	B	A	R	C	O	D	E								
30H	32H	42H	41H	52H	43H	4F	44H	45H	20H	20H	20H					

7	1	3	0	6	0	0	4	0	0	5	1	3	0	2	1	2
37H	31H	33H	30H	36H	30H	30H	34H	30H	30H	35H	31H	33H	30H	32H	31H	32H

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H

0	0	0	0	0	0	0	0	0	0	0	0
30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H

5	0	*	*	*	*	*	*	*	*	*	*	C			
35H	30H	10H	10H	10H	10H	10H	10H	10H	10H	10H	10H	43H	20H	20H	20H

20H	20H	20H	20H	20H	20H	20	20H	20H	20H	20H	20H	20H	20H	20H	20H

0	3	P	R	I	C	E					
30H	33H	50H	52H	49H	43H	45H	20H	20H	20H	20H	20H

2	0	0	2	1	0	0	9	0	0	2	0	7	1	1	5	0
32H	30H	30H	32H	31H	30H	30H	39H	30H	30H	32H	30H	37H	31H	31H	35H	30H

6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H

0	0	0	0	0	0	0	0	0	0	0	0
30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H

£	*	*	*	*	*	*	*								
9C	10H	10H	10H	10H	10H	10H	10H	20H	20H	20H	20H	20H	20H	20H	20H

20H	20H	20H	20H	20H	20H	20	20H	20H	20H	20H	20H	20H	20H	20H	20H

0	4										
30H	34H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30H	30H	30H	30H	30H	30H	30H	3H	30H	30H	30H	30H	30H	30H	30H	30H	30H

0	0	0	0	0	0	0	0	0	0	0	0
30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H	30H

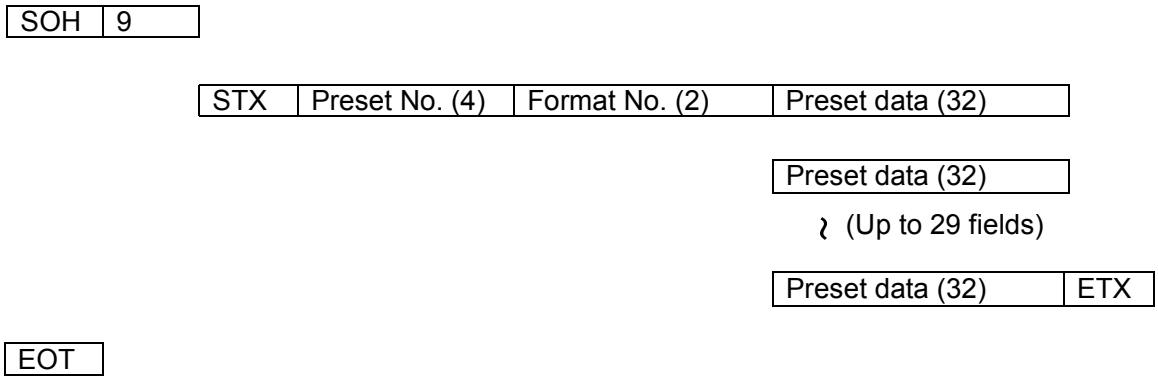
20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H

																ETX
20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	20H	03H

EOT
04H

4. Preset data: It can be sent with DATA STORE/RECALL in data maintenance mode.
Setting for preset data:
Data in the same format as fixed data of the print parameter shall be set. However, if C/D is present in the barcode field, calculate C/D and set. When format is registered, record preset.

For one data to be transmitted, SOH + 9 as header and EOT as trailer should be put for all items.



Note: Parenthesis shows the number of byte for each term.

5. Table data: It can be sent with DATA STORE/RECALL in data maintenance mode.
Setting for table data:

For table No., set “0” in the beginning of character and then data in 4 bytes. Data in the same format as fixed data of the printer parameter shall be set for table data. In sequence of table data 1, 2, and 3, transmit them.

For one data to be transmitted, SOH + H, I, and J as header (as follows) and EOT as trailer should be put for all data sets (items).

SOH	H

STX	Table No. (4)	Table data (32)	ETX
STX	Table No. (4)	Table data (32)	ETX
STX	Table No. (4)	Table data (32)	ETX

Table 1: Max. 200 data

EOT

SOH	I

STX	Table No. (4)	Table data (32)	ETX
STX	Table No. (4)	Table data (32)	ETX
STX	Table No. (4)	Table data (32)	ETX

Table 2: Max. 200 data

EOT

SOH	J

STX	Table No. (4)	Table data (32)	ETX
STX	Table No. (4)	Table data (32)	ETX
STX	Table No. (4)	Table data (32)	ETX

Table 3: Max. 200 data

EOT

Note: Parenthesis shows the number of byte for each item.

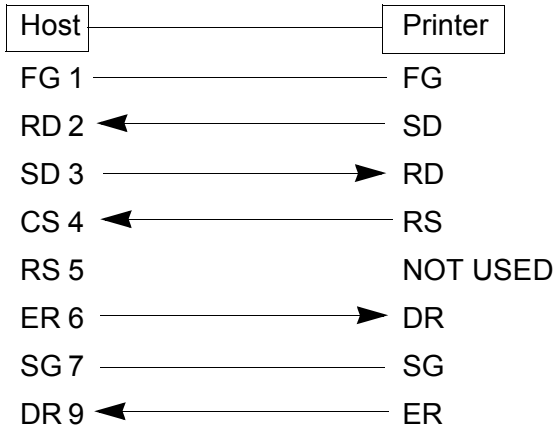
SERIAL INTERFACE

This printer confirms to RS-232C for serial interface. Receiving mode can be set by user maintenance mode.

1. Specification for interface:

Protocol	Ready/busy (Receiving of 1 item)
Communication speed	4800/9600/19200bps (Switchable)
Synchronous	Start-stop transmission
Component of character	Data bit; 8 bits ASCII code Start bit; 1 bit Stop bit; 1 bit Parity check; Even/Odd/None (Switchable)
Connector	At printer; DSUB-9P (Equivalent) At host; DSUB-25P (Equivalent) Cable length; Less than 5m
Transmission style	START | b1 | b2 | b3 | b4 | b5 | b6 | b7 | b8 | STOP
Signal level	High : +5 to +12 V Low : -5 to -12 V

2. A chart of line connection:



3. Signal for incoming and outgoing:

Pin No.	Signal	Direction	Description
1	FG	—	Frame ground
2	SD	Out	Data sent from a printer to a host.
3	RD	In	Data sent from a host to a printer
4	RS	Out	It consistently remains high level.
5	CS	—	Un-use
6	DR	In	It should consistently retain high level.
7	SG	—	Signal ground
9	ER	Out	"High" shows a condition that a printer can receive. "Low" is a general mode.

4. Protocol

1) Ready / Busy

This communication protocol receives print data only through the control of hardware signal

without software procedure.

ER signal will be used for the control of Ready/Busy.

"High"→ Ready

"Low"→ Busy

Receiving data can not assured in the following conditions when:

a)Printer is in off-line mode.

b)Printer error is occurred.

5. Code for control:

Name	Code	Action	Note
STX	02H	Start of text data	
ETX	03H	End of text data	
ESC	1BH	Command	
EOT	04H	End of communication	It can be used when font is registered.
SOH	01H	Command for specifying medium	

TRANSFER OF PRESET DATA

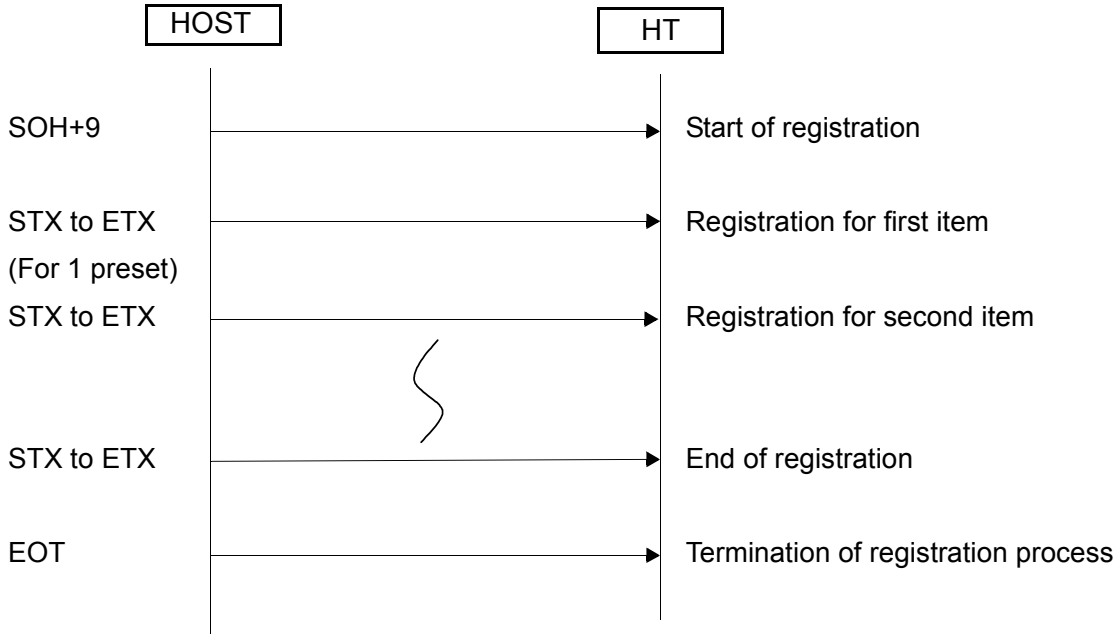
The following are general procedures on how to transfer and register preset data from a host computer.

1) With [6] pressing, turn the power “ON”.
2) Press [→] twice.
3) Select with [←] and [→] for From HOST to HT and press [ENTR].
4) Select with [←] and [→] for “Y” and press [ENTR].
5) Data is being waited.
6) Preset data can be transmitted from a host computer.
7) When data is transmitted, it goes to the screen as below:

PRESET STR / RCALL PRINTER ←→ HOST

At the beginning of preset data, send SOH + 9 and transmit preset data for next item(s). When data transmission is finished, send EOT for its termination.

When data sending is terminated, it goes back to the screen in the process No. 7 above. The following chart summarizes the flow for the registration of preset data through SOH + 9.



1. Format for transmitting preset data

FM1

An array of barcode Label size: P25.4 mm x W32.0 mm

S	Preset No.				Format No.	
T	0	0	0	1	0	1
X	30 H	30 H	30 H	31 H	30 H	31 H

*	*	*	*	*	*	*	C																								
1	2	3	4	5	6	7	0																								
31 H	32 H	33 H	34 H	35 H	36 H	37 H	30 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H

*	*	*																													
1	2	3																													
31 H	32 H	33 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H

*	*	*	*	*	*																										
1	2	3	4	5	6																										
31 H	32 H	33 H	34 H	35 H	36 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H

Dummy for data of date (Where no data is presented, it shows space.)

20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H

Dummy for preset No. (Where no data is presented, it shows space.)

20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H

*	*	*	*	*	*	*	*	*	*	*	*																				
1	2	3	4	5	6	7	8	9	0	1	2																				
31 H	32 H	33 H	34 H	35 H	36 H	37 H	38 H	39 H	30 H	31 H	32 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H

Additional field 1

20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H

Additional field 2

20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	20 H	ETX

Note: C/D should be added at host when sending.

SECTION 7: OTHERS

INTRODUCTION

This section is to assist you in using about “OTHERS ”. The following information is provided in this section.

INTRODUCTION 7-1
PRINT FOR HISTORY 7-2
SCREEN ON SEQUENTIAL PARAMETER SETTING 7-3
DISPLAY FOR GUIDANCE 7-4
SETTING FOR ON-LINE ON SCREEN 7-5
PROCESS FOR HEX DUMP ON SCREEN 7-6
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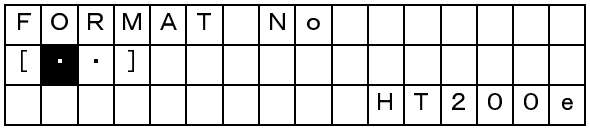
    MEMORY REGISTER AREA
    OPERATION METHODS

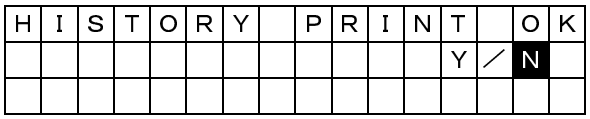
PRINT FOR HISTORY

1



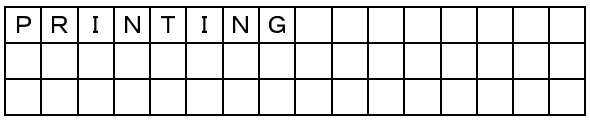
Press [.], so that it goes to the mode of history print.

2



Use [←] and [→] to select the history print. Press [ENTR], so that it prints history.

3



When print is complete, it goes back to the process No. 1.

IMPORTANT: The print for history will be applied only to No. 17, 18, and 19 in the print format for markdown label. History up to 50 can be stored as data history for the print of markdown format. Where power is “OFF”, data will be cleared.

The print will be arranged as follows:

Assumption: Date that history was printed will be printed in the first line at the top and one data with 2 lines will be printed for 5 data:

[２８０７９８　１９：２８]

ＦＮＯ：１７□□□ ＢＡＲＣＯＤＥ：５０１２３４５６７８９００

ＷＡＳ：１２５．００□ ＮＯＷ：１００．００□ ＱＴＹ：００１０

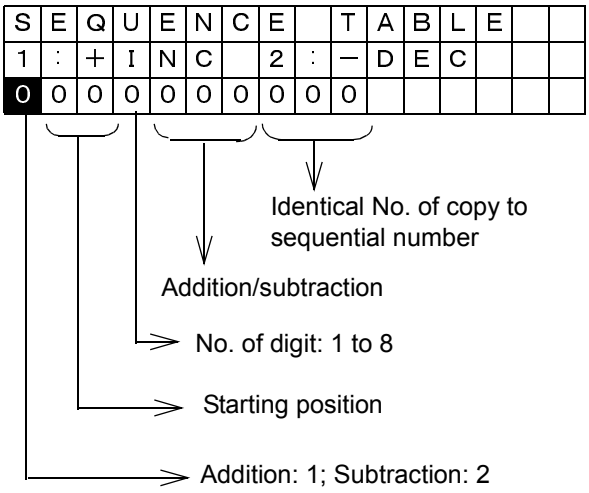
```
[280798 19:28]

FNO:17   BARCODE:5012345678900
WAS:125.00 NOW:100.00 QTY:0010

FNO:18   BARCODE:1234567890128
WAS: 19.99 NOW: 10.00 QTY:0005
                .

                .

FNO:17   BARCODE:5012345678900
WAS:125.00 NOW:100.00 QTY:0010
```

For one label, 5 sets of data will be printed.
Ten sheets of paper, up to 50 histories, will be printed.

Note: P51mm x W48mm label will only be available.

SCREEN ON SEQUENTIAL PARAMETER SETTING

Where, in the 17th digit of the sequential number field, value other than “0” is entered, sequential number will become valid. Press [FNC1], so that it goes to the screen for the entry of sequential number parameter.



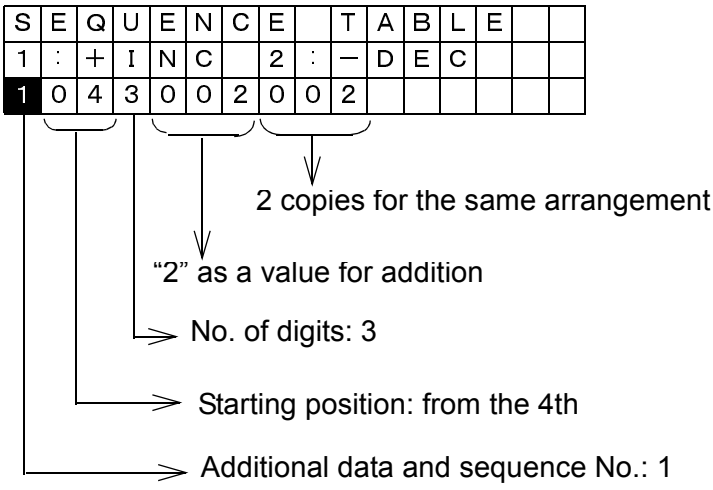
Enter value, and press [ENTR] so that it returns to the screen before registration. Where [PGUP] is pressed, it goes back to the previous screen without registration. Whereas [SHFT] is pressed, guidance will be displayed.

Set value not exceeding a total of 32 digits that are the sum of starting position and digit.

Value ranging from 1 to 9 can be registered for TABLE.

Note: Where out-of-specified data are entered and [PGUP] is pressed, data entered will be cleared.

Example)If, for the last 3 digits in a total of 6 digits, “2” is specified as additional data (value) and 2 copies are required to be printed:



Sample number:
123001
123001
123003
123003
123005
123005
.
.

Note 1: From 0, subtraction can not be made. So “0” will be printed in this case.
If, for the sequence No. with addition, “9” is arrayed in all digits and “1” is specified as an additional data, the number except the positive number (as below) will be printed as the result of calculation.

9 9 9 9 + 1 ->1 0 0 0 0 (“0000” will only be printed.)

Note 2: Should data be fixed, count will be started from the value.
If “0” is the result of the calculation for all digits based on specified subtraction, “0” will be printed in all digits.

DISPLAY FOR GUIDANCE

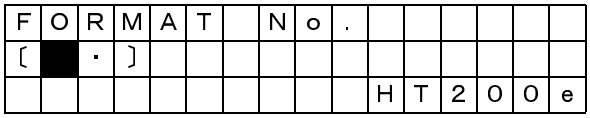
Where the screen for the entry of parameter is provided, guidance will be displayed in the second line on the screen if its feature is installed.

For further detail, see the “List of guidance”. Note that if a “downward triangle” mark can be seen at the right side of the screen, there is several guidance. So press [SHFT] to go to the screen for next guidance.

Data can be set from numeric keypad by pressing values available to input on the guidance screen.

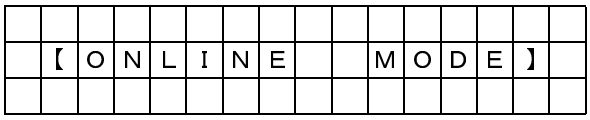
SETTING FOR ON-LINE ON SCREEN

1



Enter “70”, and press [ENTR].

2



In the process No. 2, when data requiring print is transmitted, print will start.

Note: Power should be “OFF” when on-line mode is cancelled.

PROCESS FOR HEX DUMP ON SCREEN

1

F	O	R	M	A	T		N	o	.					
[	▪	▪	]											
									H	T	2	0	0	e

Enter “71”, and press [ENTR].

2

【	H	E	X		D	U	M	P		M	O	D	E	】

Data (STX to ETX) received will be printed in hexadecimal.

Note 1: Power should be “OFF” when hex dump mode is cancelled.

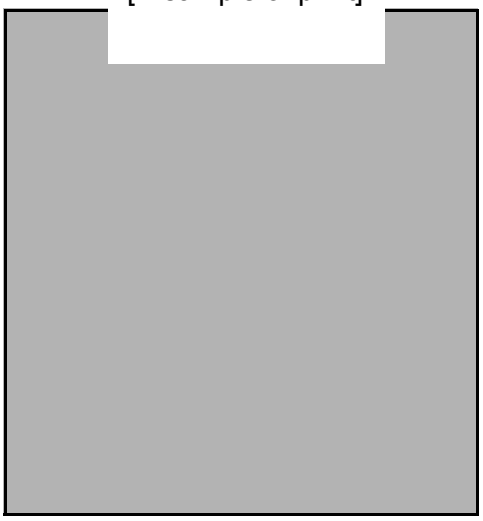
Note 2: Data between STX (02H) to ETX (03H) are made only available for the dump.

Note 3: Maximum No. of characters to be printed will be up to 377 characters.

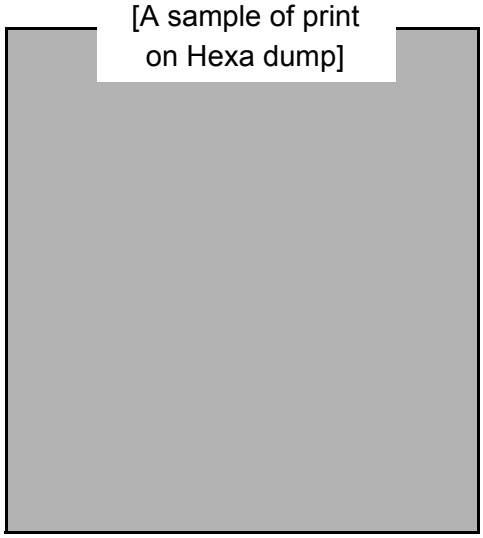
Note 4: A P51mm x W48mm label is only available.

Note 5: Press [FEED], so that one blank label will be carried.

[A sample of print]



[A sample of print on Hexa dump]



PROCESS FOR ASCII DUMP ON SCREEN

1

F	O	R	M	A	T		N	o	.					
[	▪	▪	]											
										H	T	2	0	0	e

Enter “72”, and press [ENTR].

2

【	A	S	C		D	U	M	P		M	O	D	E	】

Data (STX to ETX) received will be printed in ASCII.

Note 1: Power should be “OFF” when on-line mode is canceled.

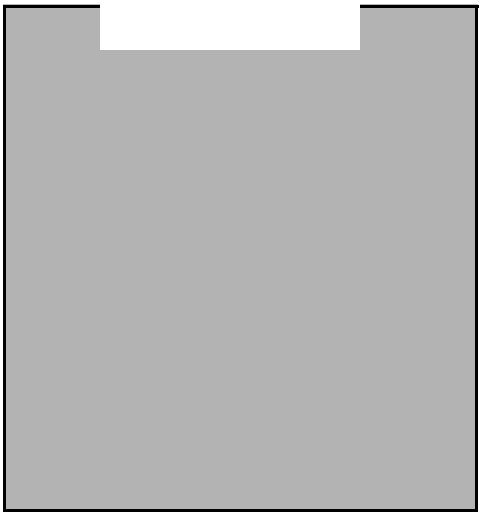
Note 2: Data between STX (02H) to ETX (03H) are made only available for the ASCII dump.

Note 3: Maximum No. of characters to be printed will be 754.

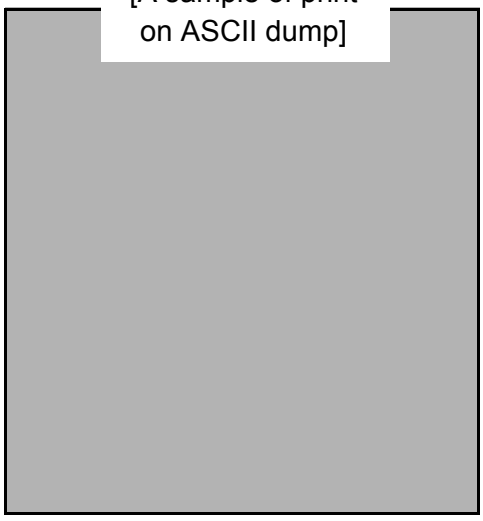
Note 4: A P51mm x W48mm label is only available.

Note 5: Press [FEED], so that one blank label will be carried.

[A sample of print]

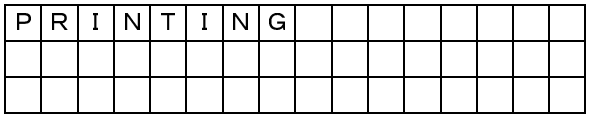


[A sample of print on ASCII dump]



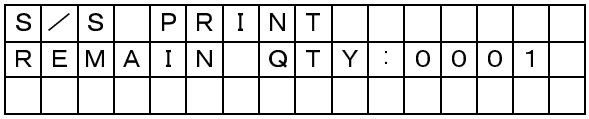
SUSPENSION WHEN PRINTING

1



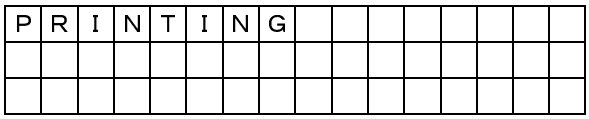
Press [S/S] while printing, so that it will stop printing temporarily.

2



When print is stopped, this display remains. Press [S/S], so that print will start again.

3

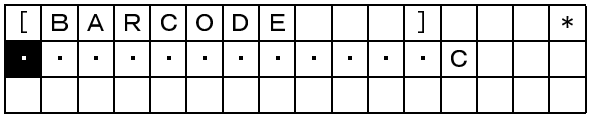


When all labels are printed, it returns to the screen for the data entry.

PROCESS FOR REPRINT ON SCREEN

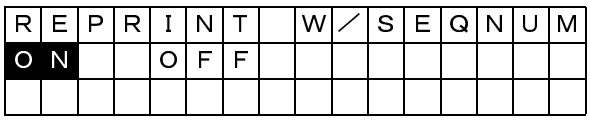
One format that was immediately printed can be printed:

1



In this display, press [S/S], so that it restarts printing.

2



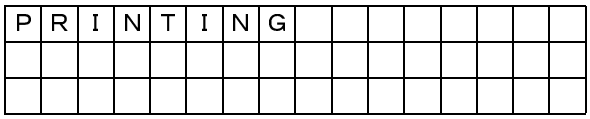
Where sequential No. is specified in the field designation, the screen for the selection whether to continue or ignore sequential number will be provided.

Select either “ON” for continue or “OFF” for ignorance but necessary for the number just before.

Then press [ENTR].

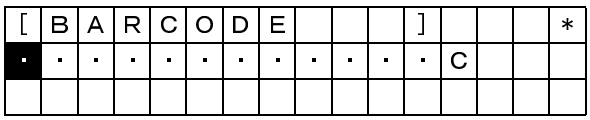
Note: If Sequential Number is not specified, data as it appears on screen will be printed.

3



One label will be printed.

4



When one label is printed, it goes back to the initial screen.

Note: For re-print, all print modes, such as manual, preset, and barcode retrieval, can be made available. However when “No” is selected for the reprint of user maintenance mode, the print will become invalid.

ENTRY FOR ALPHANUMERIC AND SYMBOL

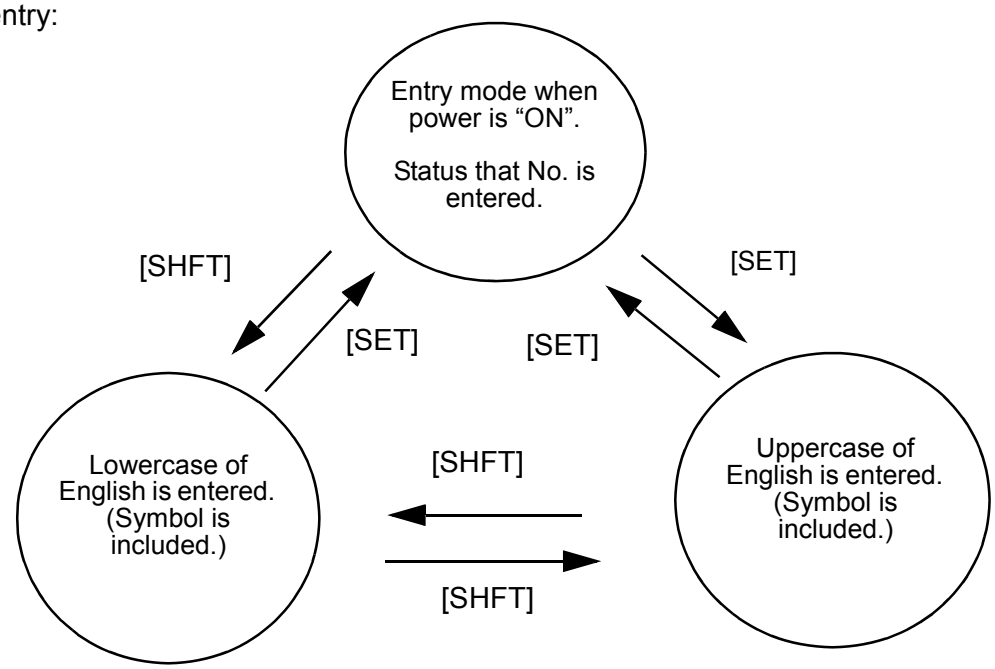
Alphanumeric and symbol:

Type	Sample	Method for entry
Upper case	A	[SET] + “2”(ABC)
Lower case	a	[SHFT] +“2”(abc)
Symbol	£	[SET] + “1” (£ ＊ ＋ ！ ＆ ％ ＄ ＝ ／ °)

A list of character:

Status for entry	Power “ON”	[SET]	[SHFT]
Status / Key	Number	English character/symbol	Lower case/symbol
.	.	() ＜＞, －：；’	() ＜＞, －：；’
0	0	YZ space ½ ¼	yz space ½ ¼
1	1	£ ＊ ＋ ！ ＆ ％ ＄ ＝ ／ °	£ ＊ ＋ ！ ＆ ％ ＄ ＝ ／ °
2	2	ABC Ä Å Æ Ç	abc □ å □ ç
3	3	DEFË É	def ë é
4	4	GHI	ghi
5	5	JKL	jkl
6	6	MNO Ñ Ö Ø	mno ñ ö ø
7	7	PQR	pqr
8	8	STU ß Ü	stu ü
9	9	VWX	vwx

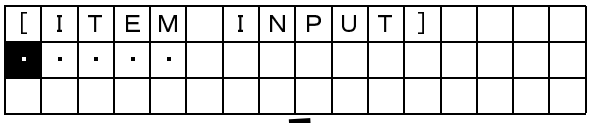
Flow for entry:



An example of entry for character

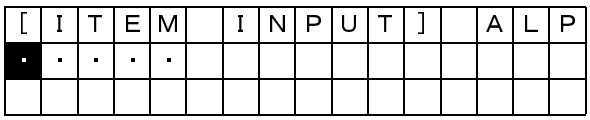
Item name “BD” will be entered: (Initial mode for entry is numeric value.)

1



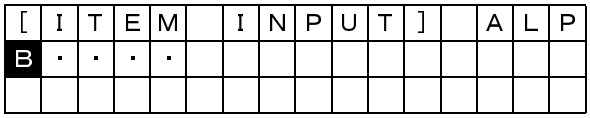
Press [SET], so that it displays ALP. It shows that it is a mode of entry in English.

2



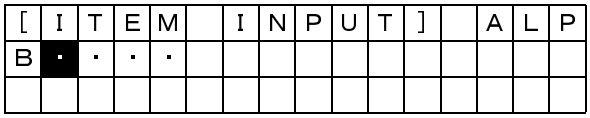
Press [2] twice, so that it displays “B”.

3



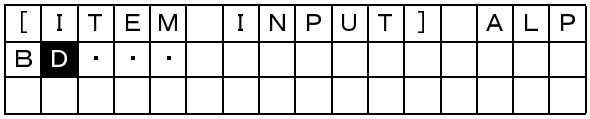
Press [→], so that it moves the cursor.

4



Press [3], so that it displays “D”.

5



Through these steps, “BD” entry will be terminated.

A LIST OF CURRENCY MARK

No.	Country	Currency mark	Position of decimal point	Font for print
01	HOLLAND	f	123456.78	
02	EURO	€	123456.78	
03	USA	$	123456.78	
04	FRANCE	F	123456.78	
05	SWISS	F r	123456.78	
06	SPAIN	P t s	12345678 (No. decimal point)	
07	ITALY	L	12345678 (No. decimal point)	
08	GERMANY	D M	123456.78	
09	AUSTRIA	Ö S	123456.78	
10	POLAND	Z ł	123456.78	

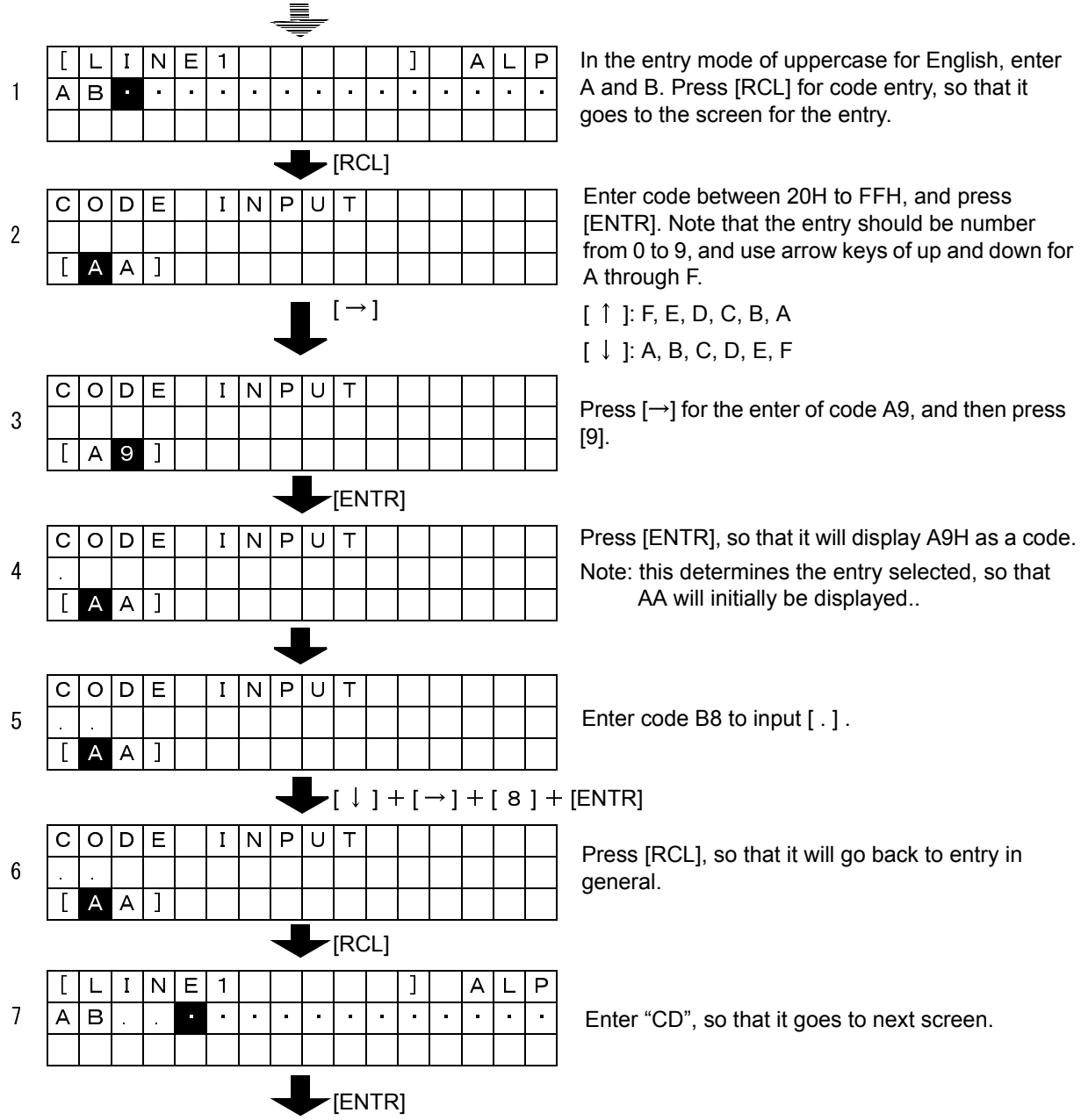
No.	Country	Currency mark	Position of decimal point	Font for print
11	CZECH	K č	123456.78	
12	RUMANIA	L e i	123456.78	
13	SLOVENIA	S I T	123456.78	
14	SLOVAKIA	S k	123456.78	
15	RUSSIA	R b	123456.78	
16	HUNGARY	F t	123456.78	
17	FINLAND	F M	123456.78	
18	GREECE	Δ P	12345678 (No. decimal point)	
19	BELGIUM	B F	12345678 (No. decimal point)	
20	SCANDNAV	K r	123456.78	

ENTRY OF CHARACTER CODE

When characters, which can not be assigned as a key, are entered, direct entry of character code is required. The following explain how to enter such a code.

For example: Where the format No. is “26” and a character code as a product name is entered. Note that this is implemented on the screen required for the product name.

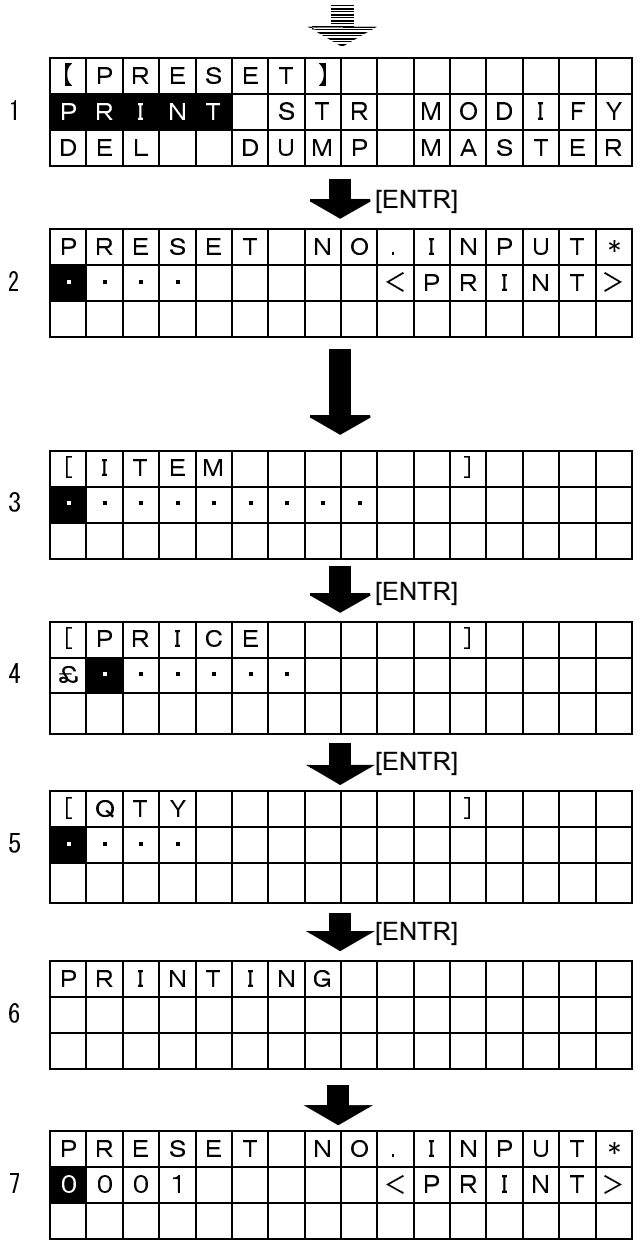
With a code page of 858, “AB ..CD” are entered:



Note:Character code can be entered with the mode of entry in English. However, the mode of numeric value can not be allowed for the entry of character code.

PROCESS FOR BARCODE-RETRIEVED PRINT ON SCREEN

When printing preset, the screen on the entry of preset No. is used to scan a barcode, and data identical to requirement will be retrieved from the preset data already registered.



On the screen for the selection of printing preset, press [ENTR] so that it goes to the screen for the entry of preset No.

This screen allows you to scan a barcode.

Note: Where free format is used, the field No. 1 should be selected as a barcode field. Note that print for barcode retrieval is to search preset data for the field No. 1., so that this is required when field parameter is established.

You should realize that the contents of data vary, depending on the format No. called up: Press [ENTR], while checking data in each

Enter No. of label within 4 digits and press [ENTR]. Note: Neither 0 nor un-entry is allowed.

It will start printing for preset:

When finished printing, it goes to the next procedure.

Preset No. for the preset data printed, will be displayed.

DELETION AND CORRECTION FOR ENTRY DATA

In HT 200e, data is overwritten when entered, in which a cursor points characters. If there are characters previously entered, new entry will delete the old ones. Where data correction is required, use a [AC] key to cancel all data for re-entry. Or move a cursor by cursor key to the position of characters necessary for the correction.

A [DEL] key, newly added to HT 200e, will act as a Back Space key (not as a Delete key) in a personal computer. Thus, the key should be used for the deletion of characters right after entering.

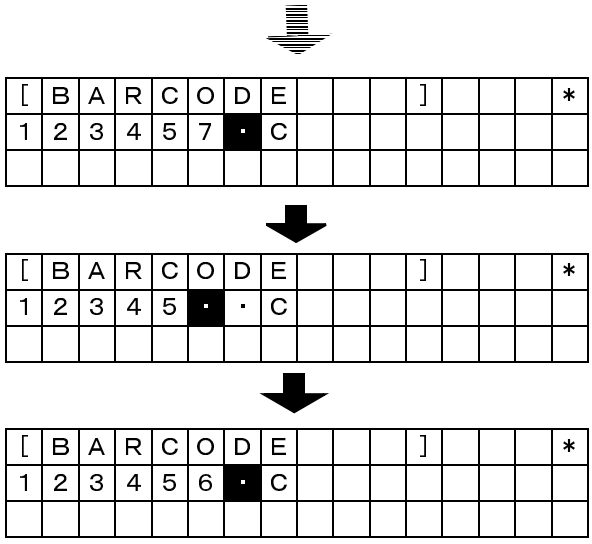
Press [DEL] key when entering data for each field, so that a character positioned at left from a cursor will be deleted, and the position of cursor is shifted to left for one digit. When doing so, characters (data) on the right to the cursor, including a character positioned by a cursor, are also shifted to left one character by one.

Note: Where a cursor is placed at the top of entry field, a character at the cursor will be deleted, and characters (data) on the right to the cursor, NOT including a character positioned by a cursor, are shifted to left one character by one. Whereas a [AC] key is used to clear all data entered in a similar manner that HT 200 Speedstar is operated, it returns a cursor to the top of entry field.

Example 1) When a barcode data is deleted and new data is entered:

１２３４５７・Ｃ　→　１２３４５６・Ｃ

Delete 7 and change it to 6.



1 Enter a barcode data in 6 digits.

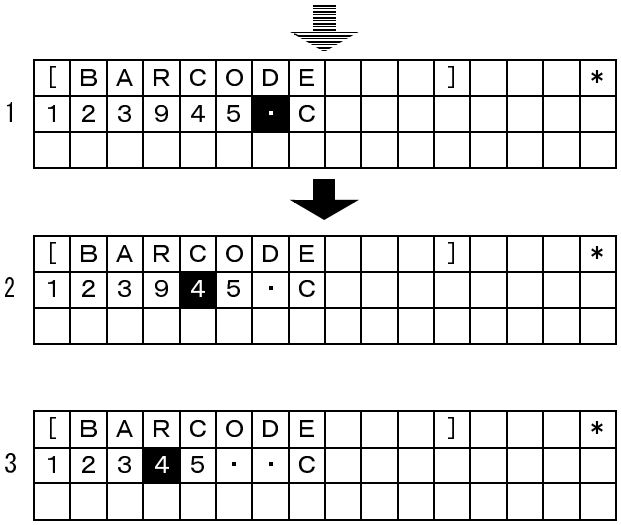
2 Press [DEL], so that 7 or supposedly mistyped value will be deleted and the cursor goes to the position needed for correction.

3 Enter 6, so that it finishes the correction.

Example 2) When one in a series of data will be deleted:

1 2 3 9 4 5 · C → 1 2 3 4 5 · · C

Assumption: Delete 9 in the 4th digit and cram the subsequent data to the left.



1 Move a cursor to the right side of a character to be deleted.

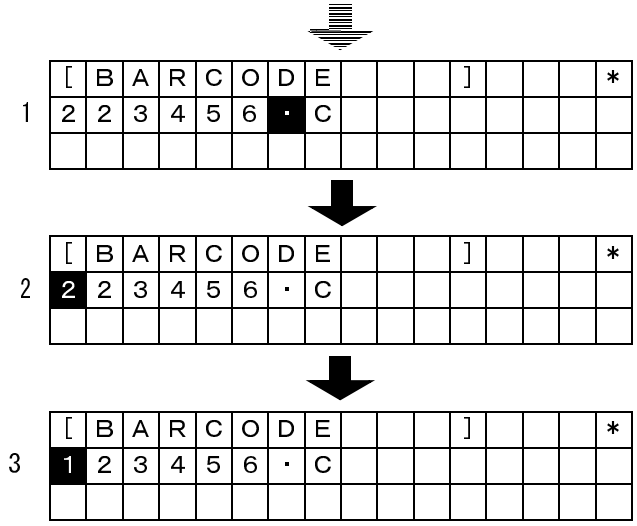
2 Press [DEL], so that a character on the left to a cursor will be deleted. Characters (data) on the right to the cursor, including a character positioned by a cursor, will be shifted to left one character by one.

3 When data is deleted, use a cursor to the position required for continuous entry.

Example 3) When one in a series of data will be rewritten:

2 2 3 4 5 6 · C → 1 2 3 4 5 6 · C

Assumption: Change 2 entered to 1.



1 Move a cursor to the digit required for modification.

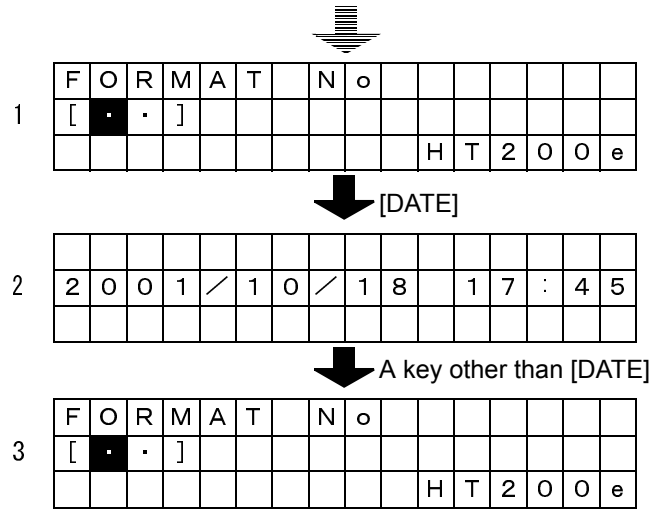
2 Rewrite the digit to required data from the position.

3 When data is modified, use a cursor to the position required for continuous entry.

PROCESS ON SCREEN FOR THE DISPLAY OF CALENDAR INSIDE OF A PRINTER

With a printer powered “On” and [DATE] pressed, a calendar in a printer will be displayed. The calendar will update time every one minute. When a normal operation is required, press any key other than [DATE], so that it goes back to the original screen.

Note: When, in the user maintenance mode, Auto Power Off is made available or becomes “On” status, a power will be “Off” in approximately 5 minutes even when a calendar is available.



On the screen for the entry of format No, press [DATE].

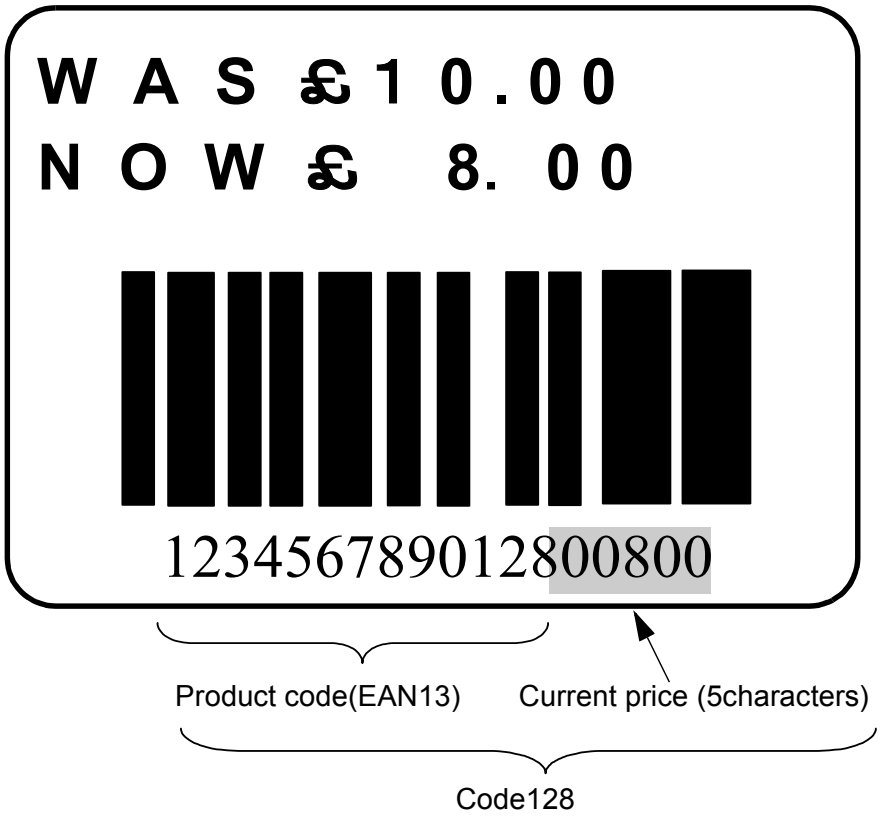
When [DATE] is pressed, it will display a calendar inside of a printer.

When a calendar in a printer is displayed and other key except [DATE] is pressed, it goes back to the original screen for the entry of the format No.

SCANNER SEARCH PRESET DATA DISCOUNT PRINTING

2500 entries of Product code (EAN8/13) + Product price (within 5 characters) transmitted from POS register can be registered in the printer's internal memory. It can print a specified format of the price calculated from the discount rate.

Format Example (EAN13)



WAS: Price before discount (Price data received from POS register)

NOW: Price after discount (Price is calculated from discount rate set)

Memory Register Area

* Registering module is inside the printer's RAM (backup)

① Specified format registering area * * If this print mode is used, this is specific format registering area. I registration Biggest field size is 30 fields (Inclusive of print quantity field)	Item name :10 byte Parameter :46 byte Fixed data :32 byte Header portion :10 byte (88x30) +10 = 2650byte
② Receiving transmission area from POS register 1. EAN8/13 + Price 5characters 2. EAN8/13 + Price 5characters · · · 2500. EAN8/13 + Price 5characters	18 byte/item 18x2500 = 45Kbyte

Operation Methods

I. Register format

Specific format is Format No. 40. The method of registering format is the same as other free format registering. However, usable number of fields, inclusive of quantity field, is 30 fields.

II. Product code + price transmission

From the POS register, product code + price data is transmitted. It will register discount product code and current price in the printer.

Online command composition

<A>

<SP>

EAN8/13 (13 digits) price data (within 5 digits) ,

⋮ ⋮ ,

⋮ ⋮ ,

,

EAN8/13 (13 digits) price data (within 5 digits)

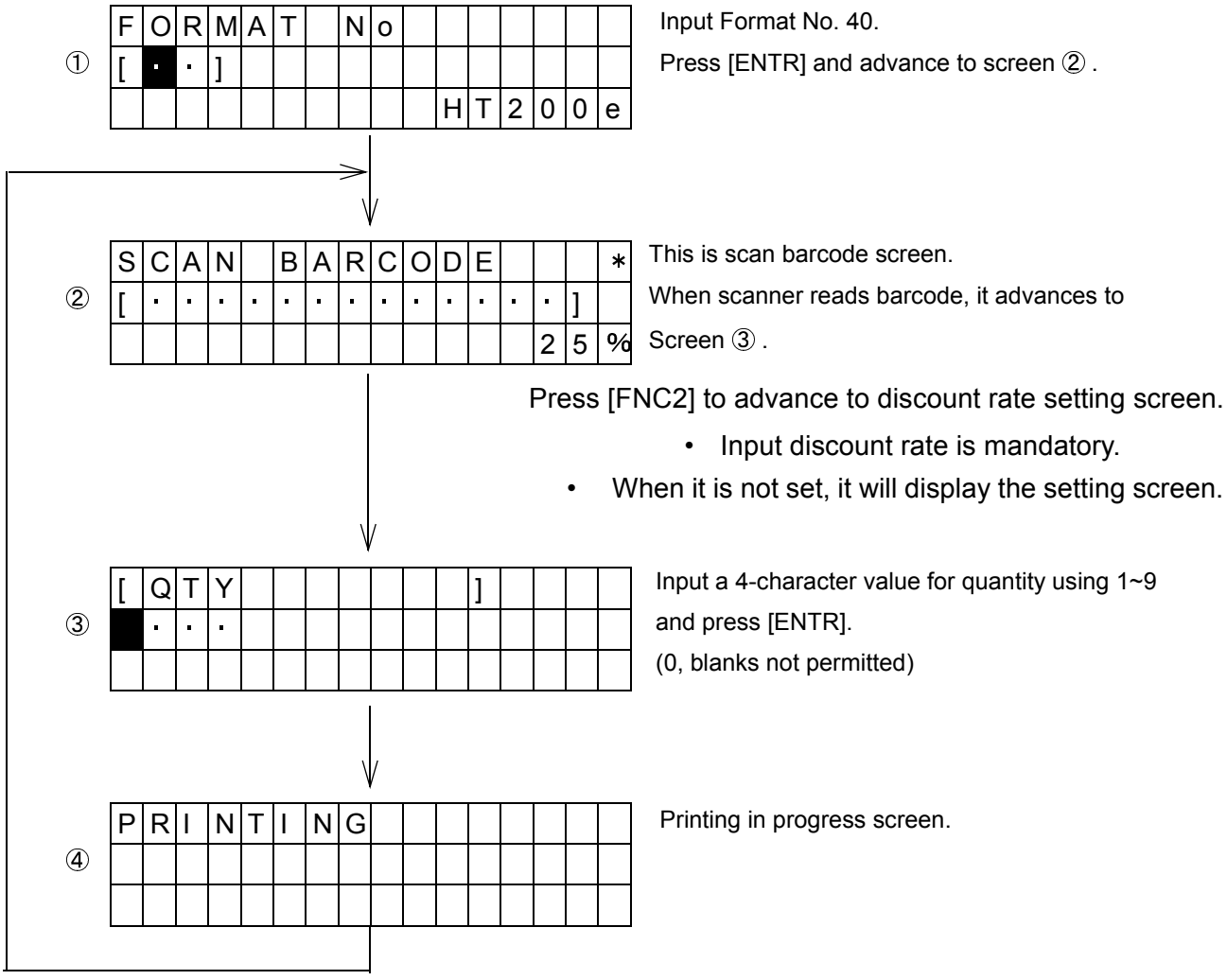
} MAX 2500

<Z>

* ・Please put a [,] in between transmitted data for product item.
・Please set product code to 13 characters. For EAN8 case, input the last 5 digits as space.
・When receiving "Product cod+Price" data, set the printer to "online" mode, and then send the data.
(Online mode is Format No.70)
・It takes about 2 minutes to send 2500 data (9600bps). Display message is same between during and after sending data.

Ⅲ. Print procedures

* Before power on, please connect the scanner.



Common operations

Press [FMT] to return to screen ① .

Press [AC] to clear input data.

Press [PGUP] to return to previous screen.

SECTION 8: CLEANING AND MAINTENANCE

INTRODUCTION

This section is to assist you in Cleaning and Maintenance the HT200e.The following information is presented in this section.

INTRODUCTION 8-1
ADJUSTING THE PRINT QUALITY 8-2
- PRINT (DARKNESS)
- PRINT SPEED

CLEANING 8-3
- SUPPLIES NEEDS
- CLEANING THE PRINT HEAD
- CLEANING THE PLATEN
- CLEANING THE PITCH SENSER

REPLACING 8-5
- THE PRINTER HEAD
- THE MEMORY BACKUP BATTERY

ADJUSTING THE PRINT QUALITY

One of the nice features of the SATO printers is their high print quality. They are equipped with two different methods of adjusting the quality of the print; print darkness and speed. When adjusting for optimum print quality, a bar code verifier system should be used. The human eye is a poor judge of the relative widths of the bars in a symbol, a characteristic that is extremely important for good bar code quality.

PRINT (DARKNESS)

This adjustment allows the user to control (within a specified range) the amount of power that is used to activate the individual print head heat elements. It is important to find a proper print darkness level based on your particular label and ribbon combination. The printed images should not be too light nor should the ink from the ribbon “bleed.” The edges of each image should be crisp and well defined.

The Print Darkness is set using the front panel LCD

PRINT SPEED

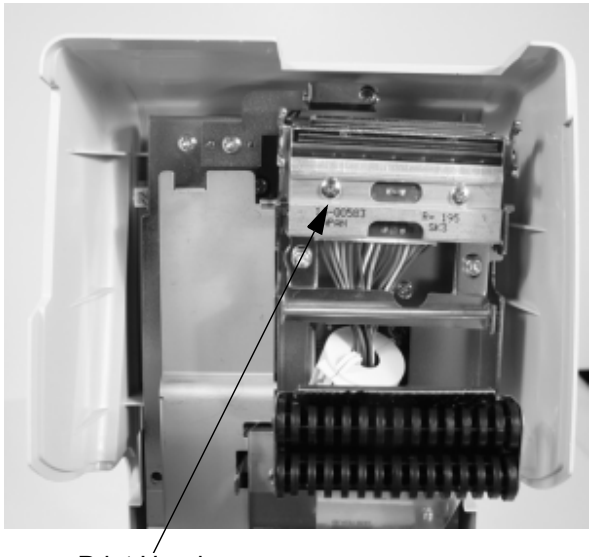
The other method of controlling print quality is by controlling the speed at which the label is printed. This adjustment is made using the LCD panel. Changing the print speed allows the user to control the amount of time allowed for print element cooling before the media is stepped to the next print position. It is especially critical when printing, “ladder” bar codes (bar codes printed with the bars parallel to the print line). When printing a “ladder” bar code, it is important to allow the head to cool sufficiently before stepping to the next position. If it does not have sufficient time to cool, the bar will be “smeared” on the trailing edge.

CLEANING

SUPPLIES NEEDS

SATO SA070 Cleaning Kit

CLEANING THE PRINT HEAD



1. Turn the printer off.
2. Open the Top Cover by pushing down on the Cover Latch.
3. The print head is mounted to the Top Cover.
4. Apply SATO Thermal Print Head Cleaner to a cotton swab.
5. The Print Head faces downward along the front edge of the assembly. Pass the end of the dampened swab along the epoxy ridge that runs the entire width of the Print Head.
6. Check for any black coloring or adhesive on swab after cleaning
7. Repeat if necessary until the swab is clean after it is passed over the head

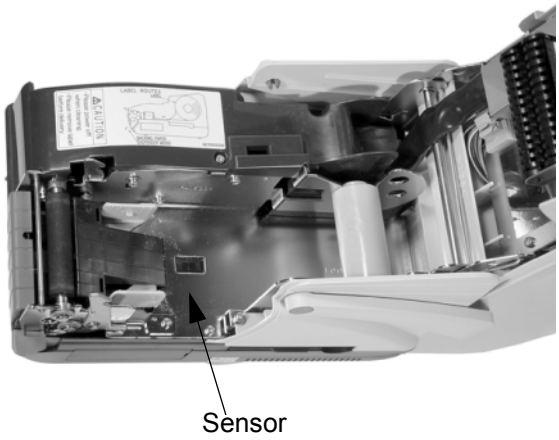
Turn the printer off.

1. Turn the printer off.
2. Open Top Cover..
3. Remove any labels in the printer
4. Apply SATO Thermal Print Head Cleaner to one of the cotton swabs.
5. The Platen is the rubber roller directly below the Print Head. It should be cleaned of label residue.
6. Repeat if necessary. The platen and rollers should be cleaned whenever foreign matter such as dust or adhesive is present.
7. Check the Label Hold Down rollers for any residue and clean if necessary.
8. Replace the labels and close the Top Cover.

CLEANING THE PITCH SENSOR

The Pitch Sensor is used to control the positioning of the label. can detect a black eye-mark, indicating to the printer that it should use this position as the start of a new label. When dust, dirt, adhesive or other foreign matter interferes with the light path of either of this sensor, the results are erratic label positioning and feeding. This sensor should be cleaned regularly, at least every two rolls of labels.

1. Turn the printer off.
2. Open the Top Cover.
3. Remove any labels in the printer.
4. The Pitch Senor is located in the paper path behind the Print Head. See *Section 2:Installation* for the location relative to the Print Head. It is positioned in the center of the label path when the Label Width Guides are adjusted.
5. Apply SATO Thermal Print Head Cleaner to one of the cotton swabs.
6. Use the cotton swab to clean any foreign matter from the exposed surface of the sensor.
7. Replace the labels and close the Top Cover.



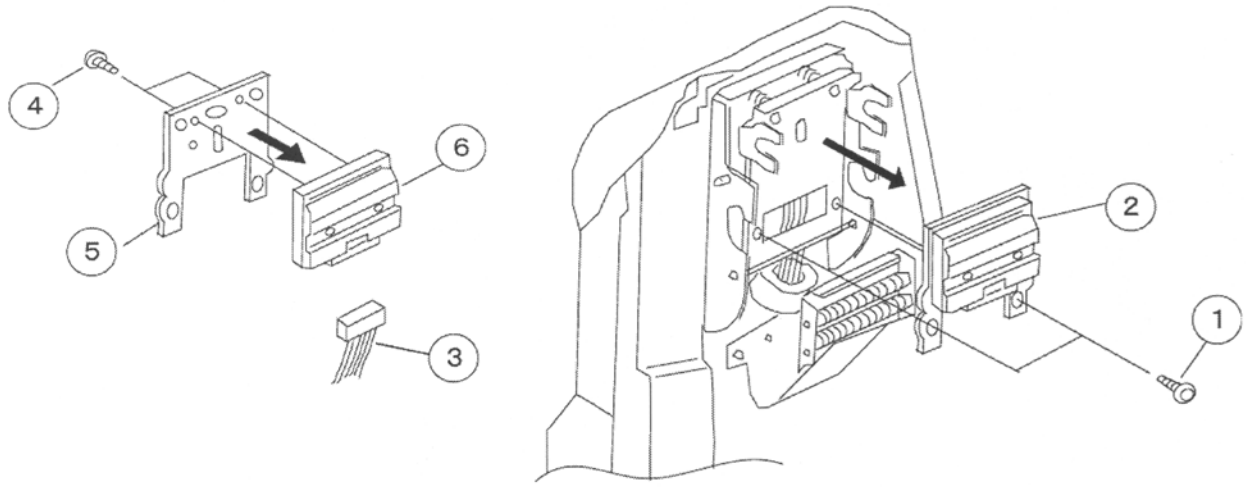
REPLACING

THE PRINT HEAD

The print head is a user-replaceable item. If it becomes damaged for any reason, it can be easily removed and replaced. Contact your local SATO representative for information on obtaining a new print head.

1. SUPPLIES NEEDED
   - No. 2 Phillips screwdriver
   - Replacement Print Head
2. HOW TO DO

1. Turn the printer off and remove the power cable
2. Open the Top Cover to expose the Print Head.
3. Remove the two Print Head Assembly retaining screws (1).
4. Remove the Print Head Assembly (2).
5. Disconnect the Print Head cable (3).
6. Remove the two Print Head mounting screws (4).
7. Remove the old Print Head from the mounting plate (5).
8. Replace the Print Head (6) with the new part.
9. Replace the Print Head mounting screws (4).
10. Reattach the cable (3).
11. Replace the Print Head Assembly (2) in the printer and reattach with screws (1).



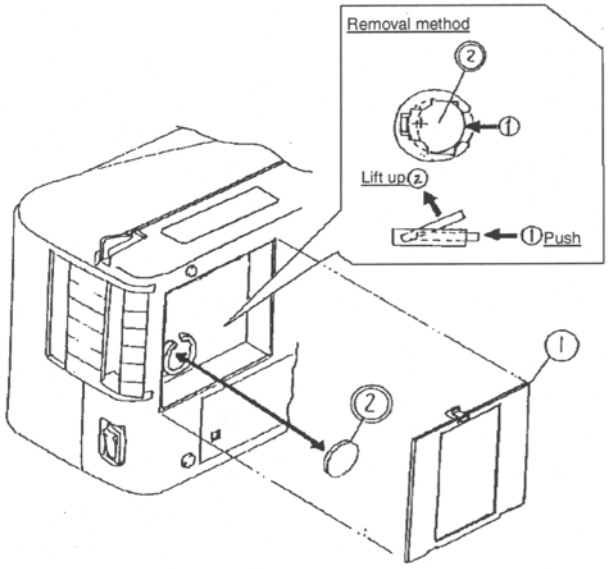
THE MEMORY BACKUP BATTERY

The RAM memory in the HT200e is maintained with a lithium battery located on the main PCB. If you receive a “PRINT BATT LOW” or “CHNG PRINT BATT” error message on the LCD display, this battery must be replaced. Back up the data stored in the printer before replacing the battery.

1. SUPPLIES NEEDED
    - No. 2 Phillips screwdriver
    - CR2450 Lithium Cell Battery

2. HOW TO DO

1. Turn the printer off and remove the power cable.
2. Place the printer on its side to give access to the PCB.
3. Remove the PCB cover (1).
4. Remove the battery (2) as shown below.
5. Replace the battery.
6. Replace the PCB cover.



SECTION 9: TROUBLESHOOTING

INTRODUCTION

This section has been devised to help you if you are unable to produce output on the HT200e printers. Use this section to make sure the basics have been checked before deciding you are unable to precede any further. The section is divided into five parts:

INTRODUCTION 9-1

TROBULESHOOTING 9-2

- INITIAL CHECKLIST
- RS232C SERIAL INTERFACE

ERROR MESSAGES 9-3

TROUBLES SHOOTING

INITIAL CHECKLIST

Is the printer powered up and ON-LINE?

1. If you are using a battery, is it installed correctly and fully charged?
2. If you are using an AC Power Module, is it installed correctly and connected to AC power

Are the labels correctly loaded?

USING THE RS232C SERIAL INTERFACE

1. Is the RS232C Serial cable connected securely to your serial port on the PC (DB- 25S or DB-9S Male) and to the RS232C connector on the printer?

   WARNING: Never connect or disconnect interface cables (or use a switch box) with power applied to either the printer or the host. This may cause damage to the interface circuitry and is not covered by warranty.

2. Is the cable defective? At the very least, you should be using a “Null Modem Cable,” which crosses pins in a specific manner. This should enable your printer to print. But we recommend that you eventually use a cable built to specifications as described in *Section 6: Interface Specifications*
3. Check for obvious errors in the data stream. Is the data properly framed with the <ESC>A and <ESC>Z commands?
4. If after sending your job to the printer, it only “beeps” and displays an error message on the LCD display, you may have a configuration problem. There may be some inconsistencies with the Baud Rate, Parity, Data Bits, or Stop Bits in relation to your host computer. If you are confused as to what the printer’s current RS232 settings are, print a Configuration Test label. It will list all of the current printer configuration settings.
5. If you’ve checked all of the above and the printer still isn’t printing, you may want to try a Buffer Hex or ASCII Dump to determine what (if anything) the printer is receiving from your computer. See Hex Dump Mode in *Section 7-6: Installation*.
6. The port is now listening for incoming data. Send your print job. The printer will now print (only once) a Hexadecimal Dump of everything it received from the host computer.

   Each 2-digit hexadecimal character represents a character the printer received. It may be tedious, but now you can analyze and troubleshoot the data stream.

7. While checking the Hex Dump printout, if you notice $0D_H$ $0A_H$ (Carriage Return and Line Feed) characters throughout. The command string should be continuous and no CR or LF characters are allowed between the Start Command (<ESC>A) and the Stop Command (<ESC>Z). If you are using BASIC, it may be adding these characters automatically as the line wraps.

8. If you're using to suppress extra carriage returns and line feeds from your data being sent out to the printer. We want the data stream to be one complete line going to the printer.
9. If you still are unable to get printer output, try the Hex Dump as described in Step 5 under the Parallel Interface troubleshooting. In this case, the printer monitors the RS232C interface for incoming data.

ERROR SIGNALS

The LCD Display provides a visual indication of the type of error encountered.

ERROR MESSAGE	CAUSE	CORRECTIVE ACTION
MEDIA PITCH ERROR	Did not detect label edge	No paper Improperly loaded paper Sensor adjustment
COVER OPEN	Top cover is not latched down	Press firmly on the cover until you hear a click.
CHARGE PWR PACK	Main battery low	Charge the battery
PRINT BATT LOW	Memory battery on the pcb is low	Replace the pcb battery. Backup you printer data before changing.
CHNG PRINT BATT	Memory battery on the pcb is dead	Change battery. Data may be lost.
NO CARD SET	No PCMCIA card detected.	Insert PCMCIA memory card in the slot.
PLS CLEAR CARD	Data found on card.	Clear the card in the data maintenance mode.
CARD BATT LOW	PCMCIA card battery is low	Replace battery. Back up card data before changing.
CHNG CARD BATT	PCMCIA battery dead.	Replace battery. Data may be lost.
WRITE PROTECT ON	Cannot write to PCMCIA card.	Check to see if card is writing protected.
CONFIRM CLR TYPE	Improper clear procedure	Clear again.
BLANK FORMAT	Unregistered format number.	Check to make sure format is registered in the printer.
DATA ERR	Entered data exceeds limits.	Re-enter correct data.
C/D VERIFY ERR	Check digit incorrect	Re-enter correct check digit.
NO UPLOAD DATA	No data to upload	Make sure there is data

INTERFACE ERR	RS232C Error	s RS232C settings.
HEAD ERR	Error in head detected.	Power off, clean head and replay power.
HEAD OVERHEATED	Head is overheated	Switch printer off and let cool
PRINTER H/W ERR	Problem in printer hard ware.	Power off and then back on.
PRESET NO ERR	Preset number is not valid	Check the preset number and re-enter.
PRESET FULL	Preset data at max capacity	Clear unused preset data
NO DUMP ERR	Cannot dump presets	No preset data registered.
BLANK PRESET NO	Preset number is not registered.	Check preset number and re-enter.